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ABSTRACT

The final report for Phase 1 of the National Committee on Employment of Youth (NCEY) demonstration project for upgrading and credentialling paraprofessionals in human-service occupations to intermediate and professional positions is directed to the occupations of: (1) addiction services worker, (2) occupational therapist, (3) public health nursing, (4) classroom teacher, and (5) child care worker. The five occupations, which were selected from more than 25 human-service occupations surveyed by NCEY, appeared to offer the most potential for successful models. The major goal of Phase 1 was to develop processes, criteria, and methodology for redesigning staffing patterns and training curricula. More than three-fourths of the document consists of individual chapters which discuss each occupation and describe significant and distinctive model features, progress in developing the model, and future steps. Similar features of the five models include: promotional systems based on performance-based criteria, collaboration of recognized institutions to develop alternative routes to more relevant credentials, academic credit toward advancement and transferable credentials, work sites used as learning sites for in-service training, and year-round operation. All are directed toward low-level, human service employees largely representing minority groups. (Author/EA)

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UPGRADING AND CREDENTIALLING PARAPROFESSIONALS: DEVELOPING NEW MODELS IN HUMAN-SERVICE OCCUPATIONS

Final Report for Phase I: September 1970 - May 1972

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DEVELOPING NEW MODELS FOR PARAPROFESSIONALS IN HUMAN - SERVICE OCCUPATIONS

Introduction

Thousands of paraprofessionals, recruited from the nation's poor and minority groups, are employed today as human-service workers in health, mental health, welfare, and educational institutions. There is ample evidence of their competence, stability, and effectiveness. Yet regardless of their ability and ambition they are locked into low-level jobs by requirements for academic and professional credentials and by archaic institutional personnel practices.

The impetus during the past half-dozen years for employing human service paraprofessionals has come from the convergence of at least three factors. The acute shortage of teachers, social workers, nurses and other human service professionals created the need for new types of personnel. The civil rights revolution developed pressure for jobs for blacks and other minorities. National legislation, including the Economic Opportunity Act of 1964, Medicate and Medicaid, the Elementary and Secondary Act of 1965, and Model Cities, have stimulated expansion of health, education and welfare services to populations of poor communities, where these services had been meagre at best, and caused an even greater demand for paraprofessional personnel.

The nationwide New Careers program, emanating from the Scheuer Amendment to the Economic Opportunity Act of 1966, was a recognition of the potential contribution to public services that can be made by capable adults from poverty backgrounds. Results to date give evidence that education, training and on-the-job experience do produce a valuable new supply of paraprofessionals, many of whom have the ability and ambition to advance into more responsible positions. Realistically, however, the new jobs it has opened are creating a "second generation" problem of considerable magnitude--namely, the obstacles blocking career advancement may trap the paraprofessionals into another job ghetto. Typically, participants are black or Puerto Rican adults whose lives up to this point have given them little cause for optimism. They have developed new capabilities and self-esteem, and then discovered that their "New Career" is only a bitter myth.

With scarcely any exceptions, employers of human service workers set the baccalaureate degree as minimum requirement for career advancement. Some agencies provide for recognizing individuals with "equivalent experience." Since they have not defined "equivalent," however, it is difficult to plan for career advancement.

In New York City, if a paraprofessional has gotten his job through the Scheuer program, he is eligible for financial support half time in associate degree programs in which he enrolls as a fully matriculated student. Provided that his employer allows him time off to attend college, the Scheuer program reimburses the employer for up to 17 1/2 hours per week of time the employee spends in study, and it also pays the college for the cost of his books and fees.

The most obvious flaw in this program is that no employer has decided what value to place on the associate degree once received; there are few career ladder steps that specify it. Furthermore, the program gives access only to tuition-free courses, i.e., City University daytime programs, and only if participants carry enough credits to be matriculated students. Most employers are not ready to release their workers for such a large part of the work week, and evening courses are excluded from the program because the colleges charge tuition for them.

The student who enrolls in evening courses on his own has serious difficulties. Many of the career-related courses (e.g., nursing) are not offered at night. If they are, it may take up to 10 years of study to attain the baccalaureate degree. If the student has family responsibilities, attending school at night could be an impossible burden.

Most of the colleges, though they express interest in the adult student, have focused on the flood of youngsters inundating them from the high schools. They have had neither the funds nor the personnel to design programs suited to a mature employed population. Their course structure is geared to the young students who bring with them none of the life experience of the older employed worker.

In short, the options now open to the adult paraprofessional seeking advancement and professional status are not satisfactory. What seems to be urgently needed for paraprofessionals is another option which will enable them to qualify for advanced positions in less time, at a lower cost, and in a more meaningful way. To develop this alternative requires a focused project that will analyze employment requirements, develop new types of training programs, and devise alternative standards and credentials.

In 1965-66, NCEY carried out one of the first demonstration training programs for paraprofessionals, and three years later conducted a follow-up study of a sampling of the graduates which indicated highly satisfactory job performance, regular salary increases, and a stable employment pattern.

NCEY's survey confirmed that the paraprofessionals recruited from among the poor brought important assets to human service agencies. According to the reports of executives and supervisors, the maturity and accumulated life experience of paraprofessinals, combined with their firsthand knowledge of the client population, were important in establishing relationships with the client population and gaining client acceptance for the agency's service. (To perform as well in this regard, the supervisors noted, young college graduates need a great deal more experience as well as special training.) However, the study also documented the fact that career advancement opportunities for paraprofessionals were severely limited by requirements for academic and professional credentials.

In July 1970, the U.S. Department of Labor's Manpower Administration awarded a contract to the National Committee on Employment of Youth to develop (in Phase I) and test (in Phase II) ways in which paraprofessionals in selected human-service occupations could be upgraded through the creation of new credentials, and through the modification of requirements for obtaining existing credentials.

This demonstration project aimed at eliminating major obstacles blocking career advancement and threatening to trap paraprofessionals in a new job ghetto. It sought to develop a range of options for advancement less costly, shorter and more relevant to the nature of the jobs to be performed. A major focus was changing the policies and practices of employers, educational institutions, unions, licensing bodies, and professional associations.

Specifically, NCEY was attempting to develop changes in qualifications and credentialling processes for advancing employed paraprofessionls in human-service occupations to first intermediate and then professional positions. Its thrust was to make credentials more relevant to job duties, give greater credit for work and life experiences, and foster mobility and transferability of skills and knowledge among human-service occupations.

In each of the occupations NCEY has or is in the process of: 1) analyzing and redesigning job duties at increasing levels of skill; 2) determining the knowledge and skills required for competent job performance at each level; 3) translating knowledge and skill requirements into training and educational programs; and 4) incorporating the preceding steps into a career mobility model with new, or adaptations of existing, credentials.

Selecting occupations

NCEY applied a number of criteria in selecting those occupations with which it would work. The occupations had to offer reasonable prospects that promotional practices could be altered and that alternative routes to professional status, with interim semi-professional levels, could be identified. All of the concerned and affected institutions and agencies including employers, colleges, unions, professional associations, licensing agencies, and others, had to be willing to consider participation.

The occupations had to be in fields which are expanding their services, where there will be a continuing shortage of professionals for some time, and where traditional routes to credentials bar the advancement of paraprofessionals. The occupations had to include employers of sufficient stature to influence employment practices in the field, and the costs of establishing models in the occupations, in time, manpower, and money had to be within reason.

NCEY staff felt that several occupations should be chosen in related fields to give us greater impact with our limited resources. We also felt that occupations selected should represent a range of problems: some should be relatively easy to involve in the project with a likely successful outcome; some would be more difficult to involve but also likely to produce positive results, and one occupation might be what we would consider a severe risk, but where positive results would have widespread implications.

To provide us with a general approach and direction, NCEY organized a committee composed of experts on manpower utilization, research and training, all of whom had experience with programs for paraprofessionals in human-service occupations. Among its members are:

DR. GARDA BOWMAN, Program Analyst, Bank Street College of Education

GARY CALNEK, Central Coordinator, Public Service Careers Program, Manpower & Career Development Agency, Human Resources Administration

PAUL CIRINCIONE, Executive Director, Local 1199, Drug & Hospital Employees Union-Voluntary Hospital League Fund

FRANCES FESKO, Psychiatric Nursing Consultant, Health & Hospitals Corporation

DR. JAY FISHMAN, President, University Research Corporation

ALAN GARTNER, Associate Director, New Careers Development Center, New York University

BETSY LUBETKIN, Supervisor, Job & Career Development, Public Service Careers Program, Manpower & Career Development Agency, Human Resources Administration

JOSE MORALES, Manpower Director, Health & Hospitals Corporation

DR. RUSSELL NIXON, Columbia School of Social Work

DR. SUMNER ROSEN, Director of Training Incentives Program, Institute of Public Administration

DAN RUBINSTEIN, Director, Criminal Law Crisis Intervention Project, New York University

The process entered into by NCEY to explore occupational areas included:

-- Examination of occupational data available from various bureaus and government agencies, professional associations, state licensing agencies, state and local codes and regulations, and existing and pending legislation, to determine numbers of people employed and needed in various occupations, and what the long-term trends seemed to be in these occupations.

-- Review of the literature including government periodicals and publications, professional bulletins and magazines, data retrieval systems, and related books and articles, to draw upon experiences of other projects and models.

-- Personal interviews and consulations with representatives of major human-service employers, unions, state and local civil service organizations, professional and occupational associations, licensing bureaus, and academic institutions, to identify promising areas and potential roadblocks in various occupations.

-- Consulation with our advisory committee, first as a group and then with individual members, as needed, to provide guidance and direction in our efforts.

-- Discussions with individuals and small groups of paraprofessionals in different occupations to ascertain what they saw as their needs for career advancement.

Through this process, we were able to identify more than 25 occupations which warranted further investigation.

Selecting collaborators

Narrowing our choice from the more than 25 occupations identified required intensive investigation, research and consultation. Protracted negotiations seemed to be inevitable before agreements could be reached. The process involved first defining our goals in terms that had practical application for the potential collaborators. Then plans were worked out which specified the responsibilities of the collaborators. In most instances, the proposed collaboration plan had to be studied by either a committee of staff and/or directors of affected departments or units.

Reaching agreement with collaborators was further complicated by sudden, drastic changes in funding of public agencies. Budget cuts and job freezes curtailed plans for expansion of services and staff in many agencies. In some instances, this resulted in shortage occupations being converted to surplus status. Administrators became extremely cautious about entering into agreements for new programs. The general economic recession forced private agencies and institutions to be equally cautious about commitments that would add to their fiscal burdens.

Surprisingly, NCEY had less difficulty than expected in gaining the cooperation of unions, professional associations, and Civil Service departments, most of which had been concerned about manpower needs for some time. These groups not only encouraged our development work, but offered extensive help in locating collaborators, provided consultation resources, participated in job analyses and curriculum development, and even offered to contribute some funding.

More problems than anticipated were encountered in identifying and working out agreements with academic institutions whose programs and courses of study were more rigidly structured. In selecting appropriate academic collaborators we sought to identify those colleges which would agree to the following structure:

-- An educational program that is extracted from the definition of skills and knowledge actually needed for professional performance.

-- Assessment of what adults already know so that they can get credit or advanced standing for that. Recognition that programs designed for 18-year olds may not be appropriate for adults with experience as workers in the field for which they are preparing.

-- Incorporation with academic credit of paid work, supervised and articulated with academic instruction into a program for the teaching of professional skills.

-- A "developmental" system of course design that takes the place of "atomized," unrelated courses and avoids the overlapping prevalent in conventional college programs (especially in disciplines such as psychology and sociology).

-- Liberal arts courses that are relevant to the tasks to be performed --

e.g., a strong program in English for the development of speaking and writing skills, science courses related to health occupations -- taught with enough depth to be of use to the learner.

-- Year round (11-month) programs for maximum utilization of time.

-- Willingness to regard the employing institution as a collaborator in curriculum development and instruction.

Occupations not selected

Occupations were not selected for a variety of reasons. Some did not meet the criteria we had established. Others did not have sufficient resources. And still others had too many internal and administrative problems. The occupations we looked at and the reasons for not selecting them were:

-- Case workers in the New York City Department of Social Services. Severe budget cuts led to a mass layoff of case workers. New welfare laws, uncertain staff patterns under reorganization and a "hard line" toward welfare recipients further clouded possible collaboration.

-- Ambulatory care team member with Bellevue Hospital Center, leading to positions as Nurse, Social case worker, Nutritionist, Dietician, or Community health educator. The medical board of Bellevue, decided to delay any new staffing patterns for at least a year.

-- Hospital case worker with New York City Municipal Hospitals. Several directors of hospital departments of social service felt uncertain about effects of budget cuts on their departments which limited job lines and cut time available to develop a program.

-- Social worker assistant with Mt. Sinai Hospital. The social service department decided it could not commit enough staff time to make the project work.

-- Sanitarian with New York City Health Department. Employed sanitarians and union officials were not amenable to reducing educational requirements or changing the existing credential.

-- Public health educator with New York City Health Department. Only 30 public health educators were employed by the city and there were just two vacancies.

-- Physician's assistant with New York City Health Department or a Veterans Administration Hospital. It appeared unlikely that the necessary steps could be taken quickly enough to achieve success during the project's existence. Also clouded by opposition of physicians, nurses, unions, and others.

-- Laboratory technologist with various health institutions. The automation of medical laboratories is accelerating at a rapid rate requiring less skill on the part of employees. There was also a lack of employer interest and some professional resistance.

-- Blood banking technologist with Community Blood Council of Greater New York. There was not enough information to warrant its inclusion in the project.

-- Physical therapist with New York State Department of Mental Hygiene. Appears to be so specific in its techniques that there would be little transferability to other fields.

-- Speech and hearing therapist with New York State Department of Mental Hygiene. Problems of highly specialized technical preparation.

-- Recreation therapist with New York State Department of Mental Hygiene. Not a clearly defined occupation; hard to distinguish from other recreation workers.

-- Psychologist with New York State Department of Mental Hygiene. The credential required is too high.

-- Inhalation therapist. Could not locate an employer interested enough.

-- School social worker with New York City Board of Education. High credentials required and very few openings.

-- School guidance counselor with New York City Board of Education. High credential required and long list of teachers on the eligibility list.

-- School librarian with New York City Board of Education. No shortage of librarians locally and no interest in establishing new credentials.

-- Mental health worker with New York City Department of Mental Health and Mental Retardation Services. A new occupation with little data, no credentials, and too premature to consider.

Occupations selected

Of the 25 or more human-service occupations surveyed by NCEY, five were selected by a process of elimination. These appeared to offer the most potential for successful demonstrations.

Addiction services worker

The Addiction Services Worker model includes the collaboration of the New York City Addiction Services Agency, Goddard College, and NCEY to establish a "Learning Center" for the education and training of ASA's Horizon Project paraprofessional staff. Over a three-year period, up to 80 employees at Horizon Project, mostly ex-addicts, will be able to earn baccalaureate degrees which will enable them to advance within the city's Civil Service system to administrative and planning positions in ASA and other agencies.

Occupational therapist

The occupational therapist model includes a consortium of four state health and mental health facilities (Rockland State Hospital, Rockland Children's Psychiatric Hospital, Letchworth Village, and the New York State Rehabilitation Hospital), two academic institutions (Rockland Community College and the Hunter College Institute of Health Sciences), the New York State Departments of Health, Civil Service, and Mental Hygiene, and the American Occupational Therapy Association, collaborating with NCEY. The model aims to open career-advancement opportunities in the field of occupational therapy for economically and educationally disadvantaged workers in the four clinical institutions. Sixteen workers a year for a five-year period will be educated and advanced to restructured positions as certified occupational therapy assistants and registered occupational therapists.

Public health nursing

Public Health Assistants employed by the New York City Department of Health will be trained, educated, and upgraded to Civil Service positions first as Junior Public Health Nurses (JPHN's) and then as Public Health Nurses (PHN's). Twenty assistants a year for five years will be enrolled in the program to obtain an associate of arts degree in nursing from Hostos Community College and upon passing the state registration examination in nursing, will be promoted to positions of JPHN's. They may then enter a senior college nursing program and upon obtaining baccalaureate degrees will become PHN's. Starting in the second year of the program, 10 existing Junior Public Health Nurses will enter the baccalaureate program.

Classroom teacher

This model, to be operated with Community School District #9 (Bronx) and a collaborating 4-year college, will prepare the district's classroom paraprofessionals to become certified early-childhood teachers. This five-year project will annually enroll 30 locally-employed paraprofessional teacher aides. They will be prepared for a baccalaureate degree and teacher certification in a new competency-based program. First year enrollees will be paraprofessionals who already have some college credits. After the first year, enrollees will be at various levels of achievement.

Child care worker

In cooperation with the New York City Agency for Child Development, a community college and a senior college, NCEY is preparing a model for the education and training of child care workers in day care centers and other pre-school programs. The model will reflect the new role of Child Development Associate proposed by the Federal Office of Child Development, and a new credential for that position, a two-year associate of arts degree. Those who reach this level will be able to continue their education and obtain a baccalaureate degree in a senior college whose program will be articulated with the associate degree program.

Comparison of models

While each of the five occupations selected has unique aspects, there are common elements worthy of note. All are directed toward low-level, human-service employees largely representing minority groups, who cannot qualify for higher level positions under conventional systems despite their capability and whose knowledge of their communities has particular value for new systems of service delivery. They move the workers from where they are in terms of experience and knowledge, and relate these to the skills and knowledge they need for competent performance at increasing levels of responsibility. In fields where training for advancement has been solely or mainly the prerogative of academic institutions, the demonstration models shift this responsibility so that the employer becomes a major partner. This shift and new collaboration make preparation for advancement more meaningful and economically more feasible for employees.

The five models contain the following similar features:

-- Promotional systems based on skills and knowledge needed for competent performance in an upwardly mobile sequence which have been identified through task analysis.

-- Collaboration of recognized academic institutions to design and make available to the paraprofessionals alternative routes to credentials more relevant for adults in human service occupations, and shorter and more economical than conventional college programs.

-- Academic credit toward advancement and toward a transferable credential for what the worker has learned, whether in academic settings or elsewhere, and for relevant work experience.

-- Work sites used as learning sites where supervisors give in-service training which is accredited by the academic institutions toward credentials.

-- Year round (11-month) operation for maximum use of time and resources.

NCEY's role

Although the contract was awarded to NCEY in July of 1970, staff members did not begin their employment until September and October 1970. The agency's role varied with conditions and stages of the project's development, but in general it can be characterized in the following ways:

Initially, NCEY's main thrust was researching occupational areas and the types of personnel employed and needed, then narrowing down these possibilities on the basis of the established criteria. During this exploratory period, NCEY surveyed various human-service occupations to find out which had expanding job opportunities and where changes in promotional practices and professional credentials would be both feasible and desirable.

NCEY's next roles included those of:

-- Broker, to bring together collaborators who might not otherwise work together;

-- Stimulator, to arouse interest among potential collaborators and persuade them to participate; and

-- Negotiator, to attempt to overcome resistances and obstacles to participation in the project.

These roles involved NCEY with a wide range of forces: clinical and academic institutions, municipal and state agencies, unions, professional associations, and others, each with a different conception of the project and what it would mean to and require of them.

As a third party, NCEY has been able to exercise a unique kind of leverage. It has been free of the orthodoxy of rules and tradition which bind most occupations and institutions.

In each model, NCEY's major task has been to coalesce and harmonize the goals and operations of several potential collaborators at the precise point at which their interests coincide. The process of divining just where this point is has varied considerably among the five models.

The tasks ahead

In Phase I, NCEY has identified human-service occupations susceptible to credential change on behalf of paraprofessionals and has developed --fully or partially--models for upgrading. In the course of Phase I, we have developed processes, criteria, and methodology for collaboratively redesigning of staffing patterns and training curricula.

As we enter Phase II, development work on some models still needs to be completed. But the major goal and activity of Phase II will be to operate and test out the models developed in each of the five human-service occupations.

As the models are readied for operation in the collaborating institutions, NCEY will be carrying out a number of major tasks in addition to the catalytic and coordinative work it has done thus far:

-- Submitting or resubmitting proposals to a variety of federal and state funding agencies for the implementation of the models.

-- Giving leadership and technical assistance to the collaborators in operating and improving the models.

-- Helping service-delivering collaborators design new roles for staff as instructors and providing pre- and in-service training for them.

-- Involving interested parties such as unions, licensing and accrediting bodies, and professional societies in replicating the models.

-- Implementing an evaluative design to ascertain how well the models meet the objectives of the project.

Evaluation of the models will be especially important for NCEY and will serve three major functions:

-- Providing a detailed overall judgment of each model's effectiveness by comparing outcomes with information collected before implementation and during operation.

-- Providing feedback of interim data analysis and considered observation on which to base modifications during the operation.

-- Providing data for replication of the models throughout the country and in different fields of service.

The evaluation will focus on the following elements:

Career development of individual trainees. Data will be collected before, during, and after participation in the special training models regarding job assignments and duties, performance, salary changes, and promotions.

Changes in roles and staffing patterns. We will document the duties of personnel before, during, and after the demonstration period to determine whether the restructured roles have been put into practice. We will look for evidence that staffing patterns have changed in any or all of the collaborating clinical institutions as a result of the project and appraise the effect of these changes on assignment and promotion of personnel.

New education and training models. We will design ways of examining how this affects the enrollees' job performance and mobility; its effects on service delivery and training policies and programs in the employing institutions, and the feasibility of replicating the models in other places.

We will look at the percentage of students who complete the program and the time they require for completion, and for evidence of the value of academic degrees in increasing participants' abilities and helping them to qualify for promotion within the institutions, in other institutions, or in related fields.

We will attempt to develop methods for documenting the ways the employers and the collaborating academic institutions affect the program and policies of one another.

Effect on accreditation, Civil Service systems, and curricula. We will look at changes in requirements of professional associations, academic institutions, and changes in local and state Civil Service employment.

Interdisciplinary applications. We will look for evidence that the training models have opened career options to participants in related fields and for applications of the training and education model in opening career ladders in other disciplines.

We will identify and compare curriculum components and methods applicable to all models and elements which may be applied generally in all training programs.

As the occupational models are implemented, we will be building in a level of expertise which heretofore did not exist in the participating institutions. The nature of the models and the process for developing them should establish precedents for continuing academic-institutional collaboration in other occupations and in other settings. NCEY, through its publications and reports will facilitate replication of the models throughout the country.

The remaining chapters of this report discuss each occupation individually, describing the significant and distinctive features of each model, progress made in developing the model, and the next steps to be taken.

A separate volume of Appendices incorporates exhibits, letters, and other documents produced during the developmental stage of the project and of value to others seeking to replicate these experiences.

ADDICTION SERVICES WORKER MODEL

This project, to be conducted in collaboration with the New York City Addiction Services Agency and Goddard College, brings together the nation's most experienced municipal agency in the drug abuse field with a college that has pioneered in adult degree study programs. It will test an alternative to current promotional practices and a new route to a transferable credential for direct service paraprofessionals employed by ASA's Horizon Project.

By establishing a unique Horizon Learning Center staffed by Goddard Faculty, adjacent to Horizon Project's drug-treatment and community-education facilities, the project will integrate in-service training with an academic degree program, avoid duplicating instruction, and stimulate individual learning. HLC will conduct the in-service program for Horizon workers, conduct the bachelor's degree program, develop learning resources, and provide "learning counseling" needed by the trainees. It will give ASA's employed paraprofessional staff education and training for advancement in a promotional system based on assessment of knowledge and competence needed for increasing levels of responsibility.

Because ASA was one of the first such agencies in the nation, some of its employees have more experience as addiction service workers than most others in the field, including professionals. The program aims to give these paraprofessionals the general and theoretical education they need to apply their empirical learning at policy and planning levels. By earning a baccalaureate degree they will be able to attain a credential transferable into other agencies and related fields.

The three-year operational model is designed to offer in-service training to all Horizon Project paraprofessionals (up to 80 employees) and to open the baccalaureate degree program to any who elect to accomplish the requirements for the degree. The requirements are 36 months of "learning contracts," one to six months long, i.e., study projects planned by student and faculty and evaluated by both on completion by the student. Less than 36 months of study may be required of students who get advanced standing for previously acquired knowledge and experience. The baccalaureate student will work with his faculty mentor regularly each week on an individual basis, will have a half-day of formal in-service training per week, will attend monthly all-day workshops and five-day annual intensive resident sessions at Goddard College and will use these resources in completing his study projects.

The addiction field has an enormous and growing demand for personnel. Paraprofessional employees predominate both by choice and for lack of trained processionals. There is no established discipline or course of study for preparation of addition specialists. This project's in-service training is based on job analysis that has

identified the major tasks addiction services workers perform and the skill and knowledge levels needed for their performance at entry and more advanced levels. As the curriculum for this program is tested in operation, the aim is to identify a body of knowledge generally applicable for the preparation of addiction services workers.

The need

ASA was established in 1967 as the nation's first municipal agency to devote itself solely to coping with problems involved with drug abuse, in a city which, with 3 percent of the nation's population, has 52 percent of its addicts. The agency grew in four years from 288 to 900 non-clerical personnel, with another 1,200 persons employed by its delegate agencies. Its budget increased from $2.4 million to $90.9 million in the same period.

Operating the nation's largest program in a nationally burgeoning field, ASA will have a continuous and rapidly expanding need for trained personnel. In addition to present and expected openings for addiction services workers in ASA and its delegate agencies, the demand for personnel capable of organizing and directing drug-abuse programs is mounting in industry, in state and Federal agencies, and in communities of all sizes and locations.

The spiralling personnel need has not been met locally or nationally. Colleges and universities have, to our knowledge, no courses of study that prepare addiction specialists; Government-sponsored training consists primarily of institutes a few days or weeks in duration. Locally and elsewhere, many addiction services programs have employed ex-addicts and community personnel by preference. As a practical fact, the alternative of experienced professionals does not exist. The effectiveness of drug abuse programs therefore depends mainly on in-service training of paraprofessionals. New, widely applicable training curricula and methods are sorely needed.

ASA's need for the project

ASA urgently needed an upgrading plan at the time of NCEY's initial contact with the agency. Its direct-service paraprofessionals were employed in an addiction specialist series with unusually flexible advancement requirements from addiction aide in five steps to supervising addiction specialist. ASA had recently come under the jurisdiction of the New York City Civil Service Commission, and all positions were subject to competitive examinations. The skills and knowledge required at each career-ladder level had not been clearly defined. Objective means of assessing a candidate's performance and knowledge had to be developed if ASA was not to regress to conventional academic and

experiential prerequisites. No such means have been available up to now.

The reconstitution of ASA in 1970 from an exclusively operating agency back to its original purpose--primarily a coordinating, administering, funding, and planning agency--also demanded different kinds of staff education and a new upgrading plan. ASA's expanding program is opening many new jobs, but few paraprofessionals are prepared to compete for these. New agency responsibilities and the sponsorship of new treatment modalities as well as increased emphasis on community education and prevention require more personnel with administrative, communication, and community-relations skills. Because of the assets of the direct-service worker in filling these roles, the agency has expanded its addiction specialist series as the best way of integrating administrative and community-relations skills. But few steps to prepare paraprofessionals to fill these jobs have been taken up to now.

The paraprofessionals to be upgraded

ASA is largely manned by paraprofessionals because of the agency's view that direct-services staff should be drawn from and related to the community they serve. Workers from other environments are likely to be rejected by the addict because they "don't understand what I've been through." Thus, ex-addicts are assigned to work with addicts, and staff from ethnic and socio-economic backgrounds matching that of the local population work on community problems related to drug abuse.

ASA has found in its paraprofessionals a strong ability to get along with people, a desire to do something about their neighborhoods, a willingness to learn, and a high energy level. Many have developed considerable skills in their work with individuals, groups, and community organizations. They have insight and background in the field of addiction that many college graduates who fill central administrative positions lack. Yet few have advanced to central administrative positions or felt qualified to apply. An upgrading program could prepare them not only for these jobs but for equally hard-to-fill top management and planning positions in ASA's field operations and in other agencies.

There is no intent to add credentials requirements for promotion with ASA. But a credentialing plan is needed to eliminate several obstacles to career advancement:

--Professional and supervisory positions in ASA subcontractor agencies and other agencies offering related services (e.g., employment, rehabilitation, probation, and parole) are closed to them because of formal credential requirements. (Ex-addicts are denied entry into most of the rest of the job market.)

--Earning a credential is important in strengthening the paraprofessionals' sense of confidence and competence. The "failure" stigma of ex-addicts in particular is so vividly felt that few believe they can move into responsible positions without a credential.

Conventional education systems have not been useful in meeting the personnel need because few addiction workers enroll in city-sponsored or night-college courses, which resemble the schooling they have failed or avoided in the past. Few can afford to stop work to attend college full time and, when they do, they are "misfits" in a structure designed for teenagers and receive no credit for past work or infomally acquired knowledge.

Agreement for ASA-NCEY collaboration

Interest in working with NCEY was first expressed in writing by ASA in June 1970 and submitted to the Department of Labor along with our request for project funding. Further contact was delayed until November 1970 because a new ASA commissioner was not appointed until that fall. NCEY reopened discussion in December and a formal agreement was reached with Commissioner Graham Finney in March 1971.

The agreement

NCEY's agreement with ASA provides for:

--Establishing a promotional system in ASA leading to a professional end-point in the city system, with a credential that is transferable to other agencies in addiction and allied fields, and

--Developing a training model, acceptable throughout ASA and accredited by a recognized academic institution or accrediting body, for upgrading ASA paraprofessionals to professional status at minimal cost.

Because day-to-day pressures on key ASA staff are too great to permit them to lead in a collaborative effort, it was agreed to designate an ASA program in one area of the city as a testing ground for the project. ASA's Horizon Project in the Lower East Side, which offers the gamut of services provided city-wide by ASA and is the agency's locus for innovative programming, was selected. To assure city-wide implementation of the credential, a key personnel official from the central ASA was assigned to work with the Horizon staff director and NCEY.

ASA assumed prime responsibility for:

--Defining the functions of each HP unit and the corresponding job duties for HP Personnel;

--Analyzing the skills and knowledge needed for job performance at each level to provide the basis for the training program;

--Developing objective methods of evaluating job performance.

NCEY agreed to design a training model built on ASA's training expertise that would fill training gaps identified by ASA, and to improve staff capacity for upward mobility and for handling ASA's new functions. The model will emphasize accredited on-the-job training and innovative curricula.

Selecting a college collaborator

Approaches were made to five colleges over a four-month period, from March through June 1971, with these results: Of two private colleges in New York, one evidenced interest but concluded that tailoring a program for ASA would be too costly. The other requested and received a written proposal for study but took no further action. At one college in the City University system, faculty in the School of General Studies were interested but cautioned that the necessary faculty approvals within the college and at the Board of Higher Education for such a new program might be hard to obtain. Several months later they reported that this was the case.

We had approached Antioch and Goddard colleges because at both curriculum is unconventional and work experience is considered an integral part of academic learning. Antioch's president, a trustee of Goddard, advised that the latter's experience in adult external-degree programs would make Goddard an ideal partner. For eight years Goddard has operated an external-degree program (Adult Degree Program) which offers Goddard BA studies to men and women geographically distant from the campus while permitting them to retain their current residence and responsibilities. It also has trained Head Start workers in three states. After a series of exploratory meetings, Goddard agreed in June 1971 to collaborate with NCEY and ASA.

Goddard committed itself to design and make operational an academic program leading to a Goddard degree for ASA personnel in collaboration with NCEY and ASA and to assist in curriculum development.

Developing the model

Developing trust and congenial working relations among the project participants did not come easily.

The initial attitude of HP paraprofessional staff was one of resistance to many aspects. They saw the project as a BA program giving credit for work experience rather than as a career-develop-

ment program. But as they came to understand the project's goals and methods they contributed increasingly to its development. The process was complicated by two changes in HP directors from November 1971 through May 1972.

Goddard's unfamiliarity with the addiction field and ASA's and NCEY's unfamiliarity with Goddard's educational methods called for a mutual-education process. This included exchanges of information on programs, assignment of an experienced member of the Goddard external-studies faculty to work with NCEY, and a series of visits by the New York collaborators to Goddard in Vermont and by Goddard faculty to NCEY and Horizon Project in New York. But these did not entirely eliminate communications barriers between NCEY and Horizon staff in setting project goals, or obstacles raised by differences in the backgrounds of the HP and Goddard staffs (HP comprising urban ghetto paraprofessionals who are mainly minority-group members with little formal education, and Goddard's staff consisting largely of white, middle-class, and well educated people living in a rural academic environment).

The differences, together with the strong desire of all three groups to fashion a good program, resulted in intense interaction, which at times almost took on the character of an encounter group, at a two-day session in November 1971 devoted to reviewing drafts of proposed educational and in-service programs and trainee selection procedures. But mutual trust emerged from the heated exchanges, and with it agreement that all the collaborators would work harder in more frequent meetings to resolve the issues left open. And they did.

The basic training model, developed in August 1971, consists of an in-service-training and on-the-job-experience program emphasizing technical and administrative skills and knowledge needed for job competency and advancement, and an external-degree program incorporating the in-service-training and job-experience elements as credit toward a Goddard BA.

JOB ANALYSIS:

In May 1971, ASA and NCEY staff launched job analysis in a series of meetings with administrators and staff of all HP facilities to explain the project's purpose and procedures.

Because HP staff members would be more responsive to their colleagues than to outsiders, HP, ASA, and NCEY representatives concluded that HP staff should be selected from various job levels to do their own analysis with the help of an NCEY consultant.

The consultant first trained HP staff to administer questionnaires and interviews that would elicit job-analysis data. This posed several problems:

--Staff response to the questionnaire lagged by as much as six weeks.

--Suspicions were voiced about the use to be made of the questionnaires.

--Responses were generally vague and uninformative.

--Many interviews had to be re-done to get basic data.

--Scheduling interviews amid vacations and conflicts caused by special summer programs was difficult.

The original one-month timetable for interviewing had to be extended by a month and a half.

Supervisors reviewed the questionnaires and commented on them in a second series of questionnaires. Data from the two questionnaires and interviews were analyzed by the consultant and given to NCEY in tabular form. The analysis showed 13 functions and 47 tasks performed in the project.

In retrospect, some of the difficulties could have been avoided by more extended training, closer supervision of interviewers, and more structured interviews combined with workers' logging their daily activities or observation of these by a trained observer. Useful data were obtained nevertheless because three-fourths of all staff had been covered in the analysis, and results had been reviewed with workers in all HP units and then with supervisors and training-unit heads at HP and central ASA.

In-service training

A training consultant assisted in applying the job-analysis results to a training design. She met with central ASA and HP staff in a series of workshops to specify the skills and knowledge needed for each of the tasks identified and develop the training design.

The resulting training design defined three areas of general skills and knowledge needed by staff and three substantive skill areas necessary for addiction workers to perform their jobs at beginning, middle and high levels of responsibility (See Appendix D).

General skills and knowledge:

--Orientation for all staff concerning addiction theory and programs, as well as general information about the community, the Horizon Project, and the Addiction Services Agency.

--Basic skills in reading, math, and communication techniques for trainees deficient in these areas.

--Administrative and technical skills, particularly problem-solving, planning, and supervision.

Substantive skill areas:

--One-to-one dynamics.

--Group dynamics.

--Community relations, community service, and community organization.

Academic component

Goddard faculty made several New York visits in September and October to observe Horizon Project operations, conduct group and individual interviews with HP workers, and confer with HP, NCEY and central ASA representatives. Taped HP employee interviews were further studied by Goddard curriculum designers.

As a result, the basic academic model, developed in August, was elaborated. It emphasizes conceptual, analytic, and communications skills needed by the HP paraprofessional to qualify for promotional positions, pass promotional exams, and earn transferable credentials.

Goddard has agreed to grant advanced standing for previous college work, participation in the ASA training and staff-development program, and "critical life experience." To earn credits toward a BA, a student with his faculty mentor's guidance and supervision plans and carries out a series of study projects ("learning contracts") and, on completion of each, participates with faculty in evaluating the product. Satisfactory completion of the required number of study projects meets the BA requirement. Students with no advanced standing in the Goddard regular ADP must complete eight six-month study contracts for the degree.

Students annually spend a one-to-two-week residency period at Goddard College. A New York component of Goddard designed to meet the particular educational needs of project trainees gives them more structure and support than Goddard's regular ADP and prepares them to handle study projects independently. Supports include counseling and help in strengthening their reading, writing, study, research, and abstract-reasoning skills.

Program development workshop

Drafts of both the in-service and academic designs were presented at a two-day workshop for the collaborators held in mid-November. (See Appendices D & E.)

In-service training. There was general acceptance of the skill and knowledge areas identified but some questioning of the formal training structure. Goddard representatives also felt that the content should be more closely tied to the degree program, and they

offered to develop a plan for closer integration of the two components. The in-service design presented included all of Horizon Project's paraprofessionals. With in-service training to be accredited toward the Goddard degree, the question of how credits could be accrued by workers not selected for the degree program was raised.

Academic model. With modifications hammered out in workshop sessions, the participants agreed on the following format and content of the educational program:

1. The program would begin with a one-to two-week residency period at Goddard. This would include seminars, mini-courses, workshops, faculty-student conferences, and interaction with other Goddard adult students. The residential experience would also make the total resources of the college available to Horizon students and familiarize them with Goddard on a first-hand basis.

2. The faculty at Goddard would include a coordinator based at the college who would meet regularly with a college advisory committee. He would also supervise two faculty members, based in New York City and responsible for working intensively with Horizon students. (This modified an earlier plan for two half-time faculty and two to four part-time tutor-counselors in New York.)

3. New York City faculty would hold regular individual conferences and regular group meetings with all the students. Monthly day-long sessions in New York would include (a) review of students' independent study projects (designed from one to six months in length); (b) help to the students in designing new study projects; (c) mini-courses taught by experts in their fields to broaden the educational base of HP students; (d) projects which would tap the cultural and intellectual resources of New York City; and (e) a continuing seminar whose subject area would be chosen jointly by the faculty and the students.

4. Goddard faculty would be given intensive training prior to the start of the program, including an orientation to Horizon Project.

5. Admissions policy:

--The Horizon students population would be a cross-section of Horizon staff, skewed towards those with the most favorable chances of success.

--A high school diploma, a GED, or the equivalent would be required for admission but the major criterion for enrollment would be a high level of motivation and potential for learning.

--A screening committee composed of two representatives of Horizon, two of Goddard College, and one of ASA would review the students' applications and select 24 enrollees.

--Students approved by the committee would have their records forwarded to the admissions office at Goddard College and the students would be admitted as regular Goddard students. The college would have the right to veto any application.

6. It was the consensus that the BA program would require four years or less, depending on the individual's entrance level, while participants remained fully employed.

7. Advanced standing.

Currently Goddard College gives advanced standing to students in three ways: (1) credit for successful completion of college work; (2) up to one year of advanced standing for scoring above the national average on four of five tests in the College Level Examination Program (CLEP) exams to a person with less than one year of previous college credits, and one-half year for scoring above the national average on three of five; and (3) "critical life experience" (significant learning experiences outside the college setting).

The conference ended with three issues unresolved: how to give credit for advanced standing, how to avoid instructional duplication caused by separation of in-service from academic training, and how to give academic credits for in-service training to workers not selected for the degree program.

Participants arranged for meetings during December for further information exchange and model refinement. Giving Goddard responsibility for both in-service and academic components resolved one problem but sharpened another. With Goddard in charge of the in-service training, HP workers felt more strongly about being included in both. To resolve this problem, self-selection of degree candidates was incorporated into the model revision, thus opening the academic program to all HP paraprofessionals. Some of the more experienced Goddard faculty members had earlier proposed that self-selection would produce the most motivated students and hence those most likely to succeed in the program.

By early January, a training model evolved which unified instructional leadership of in-service and academic programs and would enable any HP employee to apply in-service learning toward baccalaureate credits. The modification established a Horizon Learning Center (HLC) in New York City near the Horizon Project's drug treatment, intake, and community-education facilities where the in-service component would take place.

HLC will perform the following functions:

1. Conduct the bachelor's degree program for Goddard College

2. Conduct the in-service program for Horizon staff.

3. Develop needed learning resources.

4. Provide needed "learning-counseling."

HLC will be staffed by six persons: four will be full-time faculty, the fifth will be half-time faculty and half-time administrator, and the sixth will be an administrative assistant. A training program will be established for the faculty to acquaint them with the Addiction Services Agency and Horizon Project and to develop the additional skills needed for this program. In addition, the faculty will participate in weekly meetings to help plan and coordinate the work of the Learning Center.

Students will be able to apply in-service learning toward the BA degree in formal contracts with HLC faculty for one-to six-month study projects, to be evaluated on completion according to Goddard's standards and procedures.

Plans are unchanged for baccalaureate students to participate in annual one-week Goddard residencies and monthly day-long workshops in New York.

Since the number of employee-students may be as high as 80, each full-time faculty member will be responsible for up to approximately 18 students. Specialists, ASA staff, and outside consultants will lead seminars and workshops and guide study projects in specialized fields.

HLC staff will report to a governing board responsible for HLC's overall operation. The board will consist of representatives of Goddard, ASA, HP, and NCEY.

Goddard is responsible for maintaining academic standards in faculty appointments and student performance. HLC faculty will be appointed by Goddard's president; candidates will be screened by the board. Goddard College will grant the bachelor's degree upon recommendation of the faculty. NCEY will have responsibility for HLC fiscally and for evaluation of the total project. ASA and Horizon Project will be responsible for defining training needs, assuring relevance of in-service training, providing staff and consultants and arranging schedules for in-service training, and assuring promotion for eligible employees.

Funding

NCEY's search for funding to pay for training and educational costs of operating the program began in July 1971. Student stipends were not needed since ASA is maintaining the trainees at full salary throughout training. Trainees will pay for their own books, meals, and travel to and from Vermont and for living costs during the annual Goddard residency. The union's education fund will help an estimated 20 aid-level students meet these costs.

A request for a training grant of $511,670 for the period from May 1, 1972, through June 30, 1977, was submitted in August 1971 to the New Careers Branch of the Division of Manpower Education and Training, NIMH, which had encouraged NCEY to submit an application. Supplementary material was submitted to NIMH as model development proceeded, prior to a review of the proposal in January 1972.

Initial review of the application took place on January 30 and a site visit in February. Requested revisions were submitted March 20. The modified request was for $442,665 for a three-year period. The review council will act on the review committee's recommendation in June and NCEY is to be notified by July 1.

We have sought funds from other sources with these results:

U.S. Office of Education: We were informed that USOE's drug education funds are not available for the kind of training we are designing. They are spent primarily on short-term institutes.

U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Services: Funds are allocated regionally. SRS regional officials, when approached, said that funding could be provided only for junior and senior years of college programs.

U.S. Department of Labor, Region II, Public Service Careers Programs: DOL's Regional Office has shown interest in funding this and other parts of the project that come within Public Service Careers guidelines.

Office of Economic Opportunity: A proposal is also being prepared for OEO, which is seeking to improve career mobility for poor persons without formal credentials but with the experience to work effectively in poverty areas. The availability of OEO resources is uncertain, but OEO is interested in several NCEY models.

Next steps

In preparation for in-service training, ASA-Horizon staff, with NCEY consultant help, are about to reexamine job assignments in the light of task analysis. The goal is to relate promotional requirements to attainment of skills and knowledge needed for increased responsibilities.

Further action depends on NIMH's funding decision. If favorable, the next steps will be selection and training of HLC staff and setting up the HLC facility. If unfavorable, we will continue to pursue funding alternatives and consider resubmission to NIMH.

OCCUPATIONAL THERAPIST MODEL

In this field a consortium of health employers, degree-granting institutions, the New York State Departments of Health and Mental Hygiene, and the American Occupational Therapy Association are collaborating with NCEY to open career-advancement opportunities in institutional and community-care settings to economically and educationally disadvantaged health workers who are now employed.

The 16 workers to be enrolled annually for a five-year period will be educated and advanced to restructured positions as certified occupational therapy assistants (COTA's) and registered occupational therapists (OTR's). The college-accredited training will be based on job-analysis results and will combine continuing clinical practice with academic instruction in an individualized, laboratory approach to learning.

The consortium of clinical institutions--Rockland Children's Hospital, Rockland State Hospital, the New York State Rehabilitation Hospital, and Letchworth Village--will pool their training facilities and trainees for broader, more efficient, and more economical training than any one institution could offer. The training staffs of academic and clinical institutions will be pooled. Trainees will continue at full salaries throughout their training, and their schedules re-arranged to facilitate training.

The collaborating colleges--Rockland Community College and Hunter College Institute of Health Sciences--will initiate OT programs without needing to construct new laboratory facilities. They will accredit clinical and academic work conducted at the work sites by regular college instructors and staff of the employing institutions. The two college components will be articulated to eliminate duplication of academic work.

To make professional accreditation more accessible to experienced employees, existing measures for assessing proficiency will be applied and new ones tested. AOTA will participate in curriculum refinement and use the project to test proficiency standards it is developing.

The COTA's and OTR's will be prepared for roles restructured to improve service delivery and respond to new concepts of prevention and care in institutional and community settings.

The need

OT services are needed and used in a steadily increasing range of health and mental health facilities, including hospitals,

rehabilitation centers, nursing homes, schools, and home health-care agencies.

In New York State, most OT's work for the State Mental Hygiene Department, 143 of whose 439 budgeted OT positions were "vacant and unfillable" as of 1971. A need for 800 additional OT's in the ensuing five years was anticipated on the basis of expected growth of existing and new institutions.

A 1969 survey by the State Health Department found 330 unfilled budgeted OT positions in New York hospitals--a third of the total budgeted. Additional positions were needed but unbudgeted. Nineteen of 42 budgeted OT positions in the four institutions of the project's clinical consortium (45 percent of the total) were vacant in 1969.

There was only one accredited program in New York State for training OT assistants. About 50 students were graduated in 1971. Nationally, 36 accredited schools were graduating about 780 OT's a year as of November 1971, while the Bureau of Labor Statistics has estimated an annual average of 1,500 openings to 1980.

The OT field is marked, nationally as well as at the state and local levels, by large and continuing personnel shortages. The Bureau of Labor Statistics expects these shortages to continue as interest in rehabilitation increases and established OT programs continue to prove themselves.

The Need for Restructured Positions

Far-reaching changes in health-care facilities and patterns of care have taken the OT field well beyond its traditional functions and work sites. Prevention of illness and disability through community information and education programs is increasingly emphasized. OT's are serving as staff members and consultants for a widening range of community-based facilities and services such as halfway-houses and store front centers. The team approach to prevention, treatment, and rehabilitation is also gaining favor. These changes in and diversification of functions will continue as local programs expand and geographically centralized institutions are deemphasized.

The changes require restructuring of the OT profession and upgrading of skills to reduce costs and increase the number of trained therapists. This restructuring includes new staffing patterns, retraining of existing staff, and new personnel prepared for new roles.

The paraprofessionals to be advanced

All OT departments in every health institution employ personnel at low-level assistant or aide-type positions. These personnel are familiar with OT work, have developed some skill and knowledge of OT, understand the work requirements and, if given opportunities for advancement, will likely remain in the field. They provide an excellent and largely untapped source of OT manpower.

In addition, there is a much larger pool of patient-care personnel at the aide, attendant, and assistant levels with similar attributes and skills who work throughout large health institutions. A large percentage of them are members of minority groups. Their insights into community needs and problems can be valuable to the delivery of OT services as these services move increasingly into the community. But for the educationally and economically disadvantaged worker who cannot afford full-time college, opportunities are severely limited. Night college is costly, burdensome, and lengthy, and OT courses are rarely given at night.

Present requirements for OT credentials

The credentials required of an occupational therapist are a bachelor's degree in OT and registration by the American Occupational Therapy Association (AOTA) on successfully passing an examination. More than ten years ago, AOTA adopted the concept of training and utilizing OT assistants. The AOTA accredits programs which train assistants in either a 20-week hospital-based program or a two-year community college program. The trend is more and more to two-year community college programs, since the academic credits earned are generally transferable to baccalaureate programs.

AOTA's interest in change

The OT profession has, under AOTA's guidance, been searching for ways to augment the supply of qualified personnel. Unlike most other professional associations, AOTA is actively seeking to open the profession to persons who can demonstrate OT knowledge and skills, however obtained. AOTA recently passed a resolution making it possible for a COTA without a baccalaureate degree to sit for the OTR examination.

Early in 1971, NCEY took up with AOTA officials the feasibility of alternative routes to OT credentials. AOTA endorsed the idea and undertook active participation in the development of the

program.* In June of that year, the AOTA executive board voted for full cooperation with NCEY, including consultant assistance during the planning stages.

The chairman of AOTA's Committee on Standards and Educational Requirements was designated as liaison to the project. She has participated in program design and curriculum development and, as AOTA's associate executive director for program development, continues to work with us on further delineation of the project.

How OT was selected

Early in the developmental phase, NCEY looked into the possibility of finding a major state employer as a collaborator. Meetings were set up with the Chairwoman of the Civil Service Commission and her staff, with the Commissioner of Health, and the State Health Department's Director of Special Manpower Programs. Civil Service officials suggested we contact the Department of Mental Hygiene, the largest State employer, which was working to design career ladders for its employees.

NCEY found that the State Mental Hygiene Department had developed career ladders in nine human-service health occupations, including OT, for its 55,000 workers. The ladders were incomplete or dead-ended at several rungs. Little progress could be made toward completing them because of rigid requirements for licensing and credentialing at the associate and baccalaureate-degree levels which a vast majority of employees could not meet. The career ladders made no provision for accrediting work experience or in-service training.

It took only a single meeting with MHD's Associate Commissioner for Manpower, Employee Relations, and Training and his staff to obtain the Department's commitment to participate with NCEY in a demonstration to develop alternative qualifications for, and routes to credentials. With this pledge in hand, NCEY set about selecting, with MHD, one of the nine occupations and a suitable clinical collaborator.

All nine areas were examined jointly by NCEY and MHD from the standpoint of the existing and future manpower and service needs of the Department. Of the nine occupations, physical therapy had the highest percentage of vacancies, with OT second.

There are only one-fourth as many physical therapists as OT's in the MHD system, however, and physical therapy has greater importance in general than in mental hospitals.

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* For support letter from AOTA, see Appendix G

Of the seven other occupations considered but rejected:

--Psychiatric nursing, psychiatric social work, speech and hearing therapy, and recreation therapy had too few workers to serve the project's purpose;

--Psychology was too highly professionalized;

--Mental health generalist was an occupation with problems of definition and functions which could not be delineated within the project's time-span.

OT seemed to be the field most favorable for successful development, among the nine occupations considered.

Preliminary agreement with MHD

An agreement was reached with MHD's Lawrence McArthur, Associate Commissioner for Manpower, Employee Relations and Training in January 1971 following a letter from NCEY's project director outlining the program. (See Appendix F.) MHD assumed responsibility for improving the job specifications for the OT's it employed, designing an upwardly mobile system in all MHD settings in which they were employed, and recommending an innovation-minded institution within the department whose training personnel would be assigned to the project.

NCEY agreed to take leadership in designing the training model and to involve institutions of higher education, licensing and accreditation authorities, and those responsible for college-proficiency exams and development of external degrees.

Selecting an employer-collaborator

Locating an employer institution in the New York City area took almost six months, from January to June 1971.

A major part of that period, from January to April, was devoted to exploring the possibility of collaborating with a hospital whose administrator proposed that we replace OT with a new profession, rehabilitation specialist. This position would apparently be akin to the mental health generalist, although a clear-cut definition had not been advanced by the administrator. He contended that there would be an increasingly great demand for rehabilitation specialists because of the strong trend toward team approaches in the mental health field.

Negotiations were suspended when NCEY concluded, after dis-

cussions with several knowledgeable resources, that its goals would be poorly served working with a new and ill-defined profession not likely to be recognized for at least five years.

Strong interest in the project was evinced by another hospital which already had an active in-service program for staff at all levels. Many courses were available on site, including some given by a CUNY community college and a nearby medical center. This hospital had more experience than most with the "unitized" or team approach and was seeking to clarify the unique contributions of each of the team's disciplines.

Extensive negotiations involving key hospital staff, NCEY, and DMH led to agreement on overall goals and a tentative plan for cooperation in developing an OT project. The gathering of data on staffing patterns, promotional practices, and OT skills and knowledge was begun. The hospital was prepared to designate its six senior OT's to work out concepts, and to involve its entire OT staff of about 30 as the demonstration proceeded.

On the verge of formal agreement, however, negotiations were delayed several months when sharp statewide cutbacks in the MHD budget and a job freeze raised fears that the hospital would not be able to carry out its end of the project. For many weeks the jobs of senior OT staff appeared to be in jeopardy, and the possibility loomed that no promotional positions would be open to students who completed the project. The director sought to resolve the situation with a letter to MHD asking approval of the investment in training, and assurance that the positions would be made available. The reply was that MHD could give no such assurance and that additional training expenditures by the institution would not be approved.

The third chapter in NCEY's search for a clinical collaborator led us, at the suggestion of DMH's manpower utilization specialist, to Rockland Children's Psychiatric Hospital, a brand new facility with no training programs whose director was greatly interested in the NCEY type of program.

RCPH is a unitized hospital following the growing national trend toward an interdisciplinary team approach to habilitation and rehabilitation. Its OT's are members of teams consisting of social workers, psychologists, psychiatrists, nurses, and teachers. RCPH could, however, provide only about four trainees at any one time, and OT experiences solely in a children's psychiatric setting would be too limited. At AOTA's suggestion, we searched for other clinical settings to supplement the clinical experiences at RCPH.

Two New York City hospitals we approached were interested.

One, however, had no entry-level paraprofessional positions and, with a budget freeze, could create none. The second institution's chief occupational therapist had just resigned, and no replacement had been found.

The problem was resolved by RCPH's director, who was able to assemble a consortium of four clinical institutions, including his own, in Rockland County, New York.

The agreement

DMH approved an agreement between NCEY and RCPH for RCPH to organize the consortium. The State HD agreed that one of its institutions should be a part of the consortium. AOTA had recommended that we expand training opportunities in OT to include work experience in physical medicine as well as in mental health.

RCPH obtained agreements from the other three institutions indicating their willingness to serve as clinical collaborators in the program. They are:

--Rockland State Hospital: an inpatient psychiatric facility which provides care and treatment for patients 18 years of age and older.

--Letchworth Village: an inpatient facility which provides care and treatment for mentally retarded persons three years of age and older, and special care for the retarded with physical handicaps, including the multiply handicapped.

--New York State Rehabilitation Hospital: a residential treatment center and out-patient clinic for the physically handicapped of all ages.

RCPH itself is an inpatient facility which provides care and treatment for children from six to 16 years of age.

MHD agreed to offer project graduates employment at appropriate institutions and to spread the model to other MHD institutions.

Selecting college collaborators

In its search for academic institutions amenable to the program's basic approaches and willing to modify traditional modes, NCEY found only three in New York City which prepared OTR's and none preparing COTA's. Since more training facilities are needed, it was decided in cooperation with AOTA, to investigate the possi-

bility of stimulating the development of new OTR and COTA programs in academic institutions willing to collaborate. We were advised that this would be less difficult than attempting to change existing programs.

A few preliminary contacts with two CUNY community colleges were made early in the project's development, but they showed no interest. A meeting with the Academic Dean of the Hunter College Institute of Health Sciences, however, indicated a definite interest in the possibility of working with us to start an OT program. Negotiations had to be delayed as we still needed to locate a community college, since the Hunter Institute offers only the third and fourth years of a baccalaureate program.

When the director of RCPH agreed to organize the clinical consortium, he also recommended that we approach Rockland Community College, a two-year college. We did so, and reached an agreement. The college agreed to offer the two-year COTA program provided funding and logistic details could be worked out. The chairman of the college's Human Services Department was designated for liaison with the program.

RCC has a record of cooperative educational programming with the four collaborating clinical institutions, particularly in its Human Services Program. Recognizing the critical shortage of competent human-service personnel, the State University of New York and State Department of Education selected the college to develop a curriculum which would prepare productive workers in a wide variety of human-service agencies. The Rockland program leads to an associate in applied science degree. The college had been planning to include OT among its human services offerings, which participation in the demonstration will enable it to do.

In March 1972, we were able to reopen negotiations with the Hunter Institute, which by May had formally agreed to offer the two-year senior college program for OTR's. The Institute had planned to add an OT program as soon as feasible. Using the consortium institutions as collaborators will enable Hunter to open an OT program without the prohibitive cost of setting up clinical laboratories and, with a resource of qualified OT personnel, to augment its instructional staff.

THE PLANNING COMMITTEE

From November 1971, through May 1972, a planning committee met regularly to outline the steps to be taken in preparing a comprehensive funding proposal. Initially the committee consisted of representatives of the clinical institutions, AOTA, NCEY, and state manpower consultants. As they agreed to participate, the

academic institutions were included in committee meetings. The committee decided that a job analysis was essential if we were to effect changes in OT preparation and practice, and that a curriculum be written reflecting the job-analysis results as well as emerging trends in the OT field.

JOB ANALYSIS

At the planning committee's suggestion, jobs performed by OT's and OT Assistants in the four hospitals of the consortium were examined. The study sought to obtain information which would: (1) distinguish the tasks performed by OT's and OTA's; (2) determine the kinds of experiences which could be given academic credit; (3) provide the basis for developing classroom and clinical curricula; and (4) indicate needed preceptor training.

Of considerable importance to the job analysis was a study conducted at Ohio State University, "The Development of Occupational Therapy Job Descriptions and Curricula through Task Analysis." RCPH's chief OTR conferred with the director of the Ohio State study regarding the kinds of issues to raise in structuring the local job analysis.

The analysis was conducted in several phases. The first examined OTR jobs, using a questionnaire to determine functions performed and estimates of the relative importance of functions in terms of time spent on each. The questionnaire was pre-tested on all OTR's at RCPH and minor revisions were made.

After a training session, the chief OTR of each collaborating institution administered the questionnaire and conducted follow-up interviews with the OTR's at his institution.

There was a high level of agreement regarding the amount of time and importance of the activities and the amount of time and importance of various treatment areas and procedures.

To find out whether questionnaire replies were conditioned by what respondents thought was wanted, an observer did a timed spot-check at one institution to get a representative picture of the job. There was good agreement with questionnaire responses.

In the second phase, information concerning tasks performed by the assistants was obtained from three of the four hospitals. One hospital does not yet employ assistants. Sixteen assistants were randomly selected from units within each of the three hospitals. With minor modification, the format and items used in the OT questionnaire were used in the OTA questionnaire.

The assistants' scope of functioning was more limited than that of the therapists. Some functions they did not perform at all. Agreement among assistants in the three institutions in ranking time spent on job activities was high, although individual assistants in each hospital specialized in different areas. (For the job analysis, see Appendix Q .)

Job restructuring

Discussions of the job-analysis findings among OT supervisors and members of the planning committee led to redefinition of roles for OTR's and COTA's to include new functions toward which the profession is moving and to reallocate tasks so as to use manpower more effectively. In the new roles, the OTR is perceived as a supervisor, consultant, educator, and highly trained specialist, while the COTA assumes most of the "general practitioner" functions.

The skills, knowledge, and behaviors essential to competent performance in the new roles were identified. This, together with the results of the Ohio State study and the local job-analysis, provided a basis for constructing a curriculum.

Curriculum development

After outlining and categorizing the knowledge and skills needed to perform the tasks, the planning committee turned over the writing of the curriculum to a subcommittee composed of the Dean of Academic Affairs at the Hunter Institute, two OTR consultants, and NCEY's liaison representative to the OT program. They completed the curriculum, which was submitted to the planning committee for recommendations. A final draft was then prepared.

The curriculum (see Appendix p) covers both academic and practical portions of training for the newly defined COTA role. It includes theory and practice and is organized by functional context. Specifications have been made as operational as possible. The curriculum will include recommendations for delineating appropriate clinical and didactic training. In addition, provision will be made for students to acquire a body of general information and understanding in the liberal arts and sciences, as well as in OT's more technical aspects.

Six broad areas have been identified which encompass the total range of knowledge and skills required in the first two years:

I Generic knowledge and skills
II Normal growth and development
III Cognitive and perceptual motor dysfunctions
IV Physical dysfunctions
V Daily life tasks, including vocational evaluation and training
VI Psychosocial dysfunctions

Identification of the six areas was an organizing device to assure that relevant knowledge and skills would not be omitted. There is a good deal of overlap. In actual training, content from different areas will be fused, correlated, and sequenced.

All of Areas I and II could be combined with selected material from the other areas to form the basis for training and education in most allied health occupations. Material would have to be added for particular occupations.

Developing the model

Unique to the project is its concept of collaboration among employing and academic institutions, a professional society, the applicant agency, and key representatives of state agencies important to the success of the project and its ultimate institutionalization.

Policy board

The collaborators will set policy for operation of the project through membership on a Policy Board. The Policy Board will include one representative of each of the four collaborating clinical institutions, the two colleges, AOTA, NCEY, the special manpower programs of the Health Department, and the manpower utilization staff of the Mental Hygiene Department, and at least one student representative.

Employing institutions

Employing institutions will recruit and screen candidates for the program and recommend them to the program director and staff for final selection. Each employer-collaborator will provide clinical facilities and instruction for trainees employed by all the participating hospitals, according to the demonstration's curriculum. In addition to generic OT training at all the institutions, each will offer special learning opportunities.

The New York State Rehabilitation Hospital--experience in

rehabilitation of patients of all ages with physical dysfunctions.

Rockland Children's Hospital--instruction in an interdisciplinary team approach to habilitation and rehabilitation.

Letchworth Villege--practice with the severely, profoundly, and multiply handicapped retarded.

Rockland State Hospital--experiences with the mentally ill of all ages, including geriatric patients.

Trainees' work and vacation schedules will be arranged by employers so that they can participate fully in training. Promotion to COTA and OTR positions will be assured to all enrollees who qualify, in accordance with provisions of the OT career ladder series of the State Civil Service Commission.

Collaborating Colleges

These institutions will offer associate and baccalaureate degree programs which are pre-planned and continuously coordinated for maximum articulation. They will give advanced standing for relevant skills, knowledge, and experience previously acquired by students, using existing instruments and instruments to be developed.

They will be responsible for the educational quality and academic accreditation of the learning experiences, including clinical practice at the employers' facilities and classroom components that may take place there. The academic programs will operate on a year-round (11-month) basis.

American Occupational Therapy Association

AOTA, which now permits a COTA without a baccalaureate degree to sit for the OTR examination, is setting new eligibility criteria which will include experience and demonstrated self-learning as an alternative to formal education.

AOTA has two distinct roles in the project:

1. As consultant and adviser so that the program for preparing OT assistants will be accredited, and students who complete the training will qualify to sit for the OT registry examination.

2. Using the project as a testing ground for standards

being developed by AOTA under a Federal contract with the Bureau of Health Manpower for assessing students' proficiency and progress.

National Committee on Employment of Youth

NCEY will provide fiscal management and control, technical assistance, monitoring, and evaluation of the operating program and will feed back findings to the program staff and the collaborating institutions to help refine and adjust the project in the light of its objectives. NCEY will prepare a final report describing the program in detail, evaluating the different components, and containing recommendations and guides for modification and replication.

Specialists in the State Health and Mental Hygiene Departments

The project's replicability is of concern to the two departments. HD's durector of special manpower programs, its senior consultant in rehabilitation therapies, and the Mental Hygiene Department's manpower utilization specialist will guide the demonstration and give consultant help.

Staff

Under the Policy Board's direction, a program director will be responsible for managing the demonstration, including the education and training curriculum, staffing, staff training, relationships among the collaborating institutions, and other administrative tasks. Two OTR's will be hired as education and training coordinators--one at Rockland Community College and one at Hunter--and will conduct the academic programs, coordinate instructional activities with clinical experiences, teach some courses, provide academic guidance to students, and prepare students to take examinations for proficiency accreditation and registration. Four OTR's will be hired as preceptors, one assigned to each of the four clinical facilities, to give clinical instruction, student supervision, and counseling, and to manage scheduling of students' time. Part-time instructors will be hired at both Rockland Community College and the Hunter Institute to teach courses not covered by the education and training coordinators, the preceptors, or other clinical and academic faculty. Tutors will be employed to assist students in strengthening academic skills such as reading, report writing, and mathematics and science fundamentals. An evaluator will be responsible for evaluating the project and feeding back findings to the program director and Policy Board. Consultants will be employed to plan and conduct staff training workshops, develop and administer proficiency measures for students, and as guest lecturers.

Evaluation

The evaluation of this project will serve two functions:

Provide a detailed overall judgment of program effectiveness by comparing program outcomes with information collected before and during the program.

Provide feedback of interim data analysis and considered observation on which to base program modifications during the demonstration period.

We will evaluate the career development of individual trainees, changes in OT roles, staffing patterns, job performance, mobility, effect on accreditation and Civil Service systems, and effect on and relationship to other occupations.

How the model will work

Sixteen health workers in the four clinical institutions will be enrolled each year for a five-year period, for a total of 80 enrollees. Before students begin training, the program director will confer with their immediate supervisors so that their schedules are adjusted for participation in the clinical and academic program. He will arrange for assessment of the students' previously acquired skills and knowledge and for tutorial services. The education and training coordinators and preceptors will take part in these activities.

Student assessment

Students' proficiency will be assessed in three areas: Academic subjects, professional knowledge, and clinical practice.

Performance on appraisal instruments and observed competence will help determine what learning experiences are necessary for a particular student and what advanced standing will be given on the basis of demonstrated competence achieved through prior experience.

Academic assessment will be based upon existing tests available in New York State and measures applied by faculty of the colleges.

Advanced standing and credit for both professional knowledge and clinical practice will be awarded by the colleges on the basis of test assessment and observed competence.

Student Selection

For the first year, aide or assistant-level personnel currently working in OT departments of the clinical institutions will be selected. The second and subsequent cycles will draw from the much larger pool of patient-care personnel at the aide or attendant level, selecting those whose work histories reflect an interest in working with patients and a general sensitivity to the habilitative role of health-service personnel. Those selected will not need to have had direct OT experience.

Recruitment and preliminary selection of candidates will be done by education committees in the collaborating institutions, which have management and union representation. The committees will recommend candidates to the program director, who will arrange for final selection by the staff.

Selection procedures will include evaluation of candidates' work records and attendance, carefully structured interviews to assess motivation and aptitude, and written tests (not standardized) to identify persons whose reading and writing skills are inadequate to permit them to participate in the program.

Clinical assignments

Clinical assignments for students will be made within the four institutions comprising the consortium, and will include at least three months in each institution, enabling students to experience the full range of OT services with a variety of populations.

When a student has completed a minimum of three months in each of his clinical assignments, he may choose to continue rotating his assignments or to gain more experience in one specific institution.

The full-time preceptor (an experienced OTR) assigned to each clinical institution will have day-to-day responsibility for supervising, instructing, and counseling students.

Academic instruction

Whenever feasible, academic instruction will take place in the clinical institutions. The preceptors and the academic coordinator will have faculty status at Rockland Community College and will teach OT courses. The directors of the OT departments also may be designated as clinical instructors by the college.

Students are expected to achieve associate degrees and become

COTA's in one to two years, and to prepare successfully for the OTR examination in about three to three-and-a-half calendar years, earning baccalaureate degrees at the same time.

At the end of 18 months we expect that substantially all of the first group of students will be COTA's, functioning in the redefined role. Actual experience with the first two cycles will provide more substantial information on which to base estimates of time for program completion and actual achievement of career goals.

Staff development

Just prior to the start of the program, three three-day training institutes will be held for all the administrative and instructional staff of the colleges and collaborating institutions, using consultants for leaders. In all future years, three two-day training sessions will take place, led by project staff.

Plans for continuation and replication of the program

We are taking steps now to establish a training base in each collaborating institution for continuing the program after the demonstration period. Through subcontracts with Rockland Community College and the Hunter College Institute, we will locate academic leadership for training within these institutions. Both colleges have considered organizing OT programs for some time, and Rockland has already received approval for its program. Both are already studying ways of providing continuing support once the programs are established. The colleges anticipate receiving additional revenues under the Federal Higher Education Act.

We anticipate that once the training program proves its worth, the clinical institutions will be in a position to negotiate for inclusion of the project preceptors in their regular personnel structures.

The medical director of the New York Rehabilitation Hospital welcomes this opportunity to initiate an OT career ladder and a staff-up-grading program. Because the hospital is planning substantial expansion of staff and facilities for the next five years, there is good reason to expect that the present high degree of interest will result in continuation of the training there.

We have a commitment from the director of Rockland Children's Hospital to continue training beyond the life of the program and to maintain the collaborative effort.

The Office of Manpower, Employee Relations, and Training of the Mental Hygiene Department will make the results and procedures of the project available to other institutions in the state system and urge them to consider replicating it. The Office will also ask state educational institutions to add such a program.

Ward-level personnel in MHD institutions will be notified of opportunities to apply for the program. It will thus be available on a regional basis. The Department will encourage directors of other state institutions to make budget requests on a line basis to permit their employees to participate in the project.

NCEY, through its publications and reports, will facilitate replication throughout the country.

Funding

A first draft of a grant application was prepared for submission to the Bureau of Health Manpower Education of NIH in early 1972 to meet a March 1972 submission deadline. At a meeting with BHME staff in February, they suggested we include additional information and material and urged us not to submit a formal application until the model was more fully developed.

We submitted a revised second draft in early June and met again with BMHE staff. They encouraged us to make a few more revisions and to clarify some ambiguous points. This was done, and a formal proposal was submitted June 30. We will be notified in November whether the proposal has been approved.

The proposal requests $1,124,562 for a five-year special training program.

In mid-June 1972, the New York State Department of Civil Service filed a request to DOL's Regional Office in the amount of $156,309 for an upgrade component of its Public Service Careers Contract to support our OT demonstration for 18 months. A number of problems remain to be resolved, however:

1. The Department's PSC projects must be funded from Fiscal 1973 monies which have not yet been allocated to the region.

2. The proposal's costly nature has led Regional DOL officials to advise us to review the budget thoroughly, make cuts where possible, and obtain contributions from other sources to reduce the amount requested from DOL.

Next steps

Follow-up on contacts with funding agencies: NIH and state PSCP

Investigate potential new sources for funding: OEO, etc.

Continue contacts with State Departments of Health, Mental Hygiene, Civil Service, and Education, and with academic and clinical collaborators

Continue curriculum development

Identify existing instruments for measuring proficiency; develop new instruments as needed.

NURSING MODEL

This project will seek to enable employed, capable, and motivated paraprofessional public health assistants (PHA's) who cannot afford a full-time nursing-school program to be trained as junior public health nurses (JPHN's) and public health nurses (PHN's) in the New York City Department of Health. The project will increase the supply of PHN's, who are in critically short supply locally and nationally, while providing upward mobility to a disadvantaged group.

Success in a demonstration conducted by the nation's largest municipal health department would be applicable to departments and other health employers throughout the nation, particularly in large cities where health services to the disadvantaged need drastic improvement. It would be especially important to the many community health centers staffed by large numbers of paraprofessionals, mostly in dead-end jobs.

Collaboration between the New York City Health Department (HD) and colleges is an important innovation at a time when expanding nursing-school programs are having serious difficulty finding qualified faculty and adequate space--both of which HD will provide. The project adds a dimension to work-study by using work sites as learning centers integrated into the academic curriculum, a feature that would be helpful to many other training centers for RN's and PHN's.

The project will establish collaborative relationships between HD and degree-granting institutions and use new curricula and training methods to enable employed PHA's and junior PHN's in HD to become PHN's. It will seek alternatives to conventional college requirements that maintain high standards and are less costly, shorter, and more relevant to participants. It will help to increase the supply of professional nurses equipped by background and training to serve inner city communities.

The program will annually enroll 20 PHA's employed by HD and prepare them to become junior PHN's (Step 1) and PHN's (Step 2) in the department. HD will promote them to these positions as they qualify. Starting in the second program year, an additional 10 JPHN's will begin at Step 2 to become PHN's. By the fifth program year, 100 PHA's and 50 additional JPHN's will have enrolled.

The need

BLS in 1970 reported 660,000 RN's in the nation and 65,000 needed annually to 1980, with a steadily rising demand. Predicted passage by Congress of a national health-insurance program is expected to lead a vast increase in demand for nurses as well as other health-care personnel.

In New York City, municipal hospitals had 8,000 nurse positions in 1970 but only 4,227 nurses on the job. The city's hospitals had less than 40 percent of their budget-authorized positions. Bellevue Psychiatric Hospital had less than 10 percent. In 1969, 1,404 RN's entered the municipal system but 1,272 separated.

At the New York City Department of Health, the city's major employer of PHN's, 108 of 665 budgeted positions for public health nursing personnel were "permanent vacancies" in December 1970 because of a lack of candidates. HD has never been able to supply enough PHN's for the city's school-health programs. Expansion of community health facilities, for which there is much community demand, will aggravate the PHN shortage unless new training and accreditation approaches can be developed.

Steps taken to meet needs

HD has taken several major steps to increase nursing personnel at all levels:

--To recruit new staff, HD participates in a cooperative high-school work-study program enabling a student to work half-time at a health station during the senior year and become a PHA upon graduation. This program has so stimulated interest in nursing that half the enrollees go on to community-college nursing schools. Lacking its own training program, HD loses these recruits.

--To meet the PHN shortage in the schools, PHA's were placed there 20 years ago to relieve PHN's of many non-nursing functions. The PHA must have a high-school diploma and a year's experience in a medical setting. More than a third of the PHA's are licensed practical nurses who prefer HD's regular hours.

--A senior PHA position was agreed upon in 1970 by HD and District Council 37, American Federation of State, County, and Municipal Employees, which represents all levels of public health nursing personnel. The position has not been approved by the city Personnel Department, reportedly because it carries no new duties beyond the PHA's. HD has, however, set up the senior PHA as an in-house promotional title with a salary differential to comply with the union agreement. This has not reduced staff turnover.

--In 1970, HD converted the title of staff nurse to junior PHN. This expedient can solve little unless the supply of RN's is replenished at a more rapid rate than up to now, since the total supply of new nurses in New York City falls far short of the demand.

Present requirements

A junior public health nurse (staff nurse) must have completed an approved nursing program either in a community college associate-degree (two-year) program, a hospital-related diploma school program (usually three years), or a baccalaureate (four-year) program and have passed the state nursing registration examinations.

Requirements for public health nurse have changed since NCEY began to work in this field. Under state regulations, PHN's are required to have a baccalaureate degree in nursing as well as an RN. Until June, 1971, PHN's in New York City were only required to have an RN plus 30 specialized credits in an approved college program; a baccalaureate degree was not required. In actual fact, however, the 30 credits were available only to students enrolled in a baccalaureate nursing program. Thus, a year ago it would have been possible for NCEY to design a special 30-credit college institute separate from the BSN programs. Since the 1971 Legislature removed the HD's exemption, the baccalaureate program itself must be redesigned.

Paraprofessionals' roadblocks to advancement

The only promotional route now open to PHA's is the Civil Service clerical series. HD recently lost 30 of its best assistants at one time after they passed these examinations.

Most PHA's would like to stay in nursing--more than 56 percent expressed interest in participating in an upgrading program. But most also have families and cannot afford to quit work to go to school. About 20 of the 385 PHA's attended evening courses in 1970.

Only one or two of the city's nursing schools offer such courses, and these place heavy scheduling burdens on family heads. HD paid tuition but gave students no released time for study below the baccalaureate level.

Ascertaining the feasibility of alternatives in the field

The process of selecting public health nursing for model development began in November 1970 with a series of meetings between NCEY staff and officials of HD, who were ready to consider collaboration with NCEY for career development in several occupational areas. After four months of consultation with HD bureau directors and examination of personnel requirements, promotional practices, credentials, and career-ladder planning, the first choice of both HD and NCEY was public health nursing.

The fields of sanitarian and public health educator had also been considered. But the current surplus of technically trained personnel created little incentive for upgrading paraprofessionals to sanitarian. Public health educator held out little promise as a promotional goal because HD, the nation's largest municipal health department, employs only 30 educators. Despite considerable interest in expanding HD's public health education services, HD officials foresaw little likelihood of restructuring the duties or funding significant numbers of new positions.

Before deciding on nursing, NCEY consulted New York State Nursing Licensure officials and National League for Nursing staff to discuss the project's objectives. They encouraged us to proceed and referred us to recent league policy statements urging more recognition of students' prior education and experience. Both agencies offered suggestions as to local nursing educators who would be receptive to our ideas on nursing programs.

A discussion with the Dean of the Hunter College School of Nursing, who had built a related program* for the City Department of Hospitals, led to the establishment of a coalition of the forces needed to make the project succeed. Representatives of HD's units on public health nursing and professional education, the union, the city's Health and Hospitals Corporation and Personnel Department, and the nursing departments of several CUNY colleges and CUNY's central administrative offices weighed ideas for the project.

*An Experimental Work-Study Program to Determine the Appropriate Method to Prepare Licensed Practical Nurses for Professional Nursing, PHA Grant No. NPG 368-01

The coalition's exploration of problems and alternative solutions had the following results:

--HD documented its need for the project.

--The readiness of PHA's to participate in an upgrading program was confirmed in interviews at all health stations.

--An articulated program from PHA through JPHN to PHN was agreed upon.

--The Health and Hospitals Corporation committed the use of its facilities for in-hospital clinical experience.

--The union indicated it would help with funding.

--What appeared to be a major hurdle was discussed and overcome--the fear that state licensure officials would not approve a work-study model as an alternative route to credentials. A follow-up meeting of coalition representatives with the secretary of the State Board of Examiners for Nursing established that this would not be reason to disapprove a program which met state standards for educational content and instructional quality.

The coalition has proved of continuing value in generating and testing ideas and advancing the project's development.

The support pledged at the initial session convinced HD of the project's feasibility, and in March 1971, a draft contract between NCEY and HD was prepared. A formal agreement was signed June 11 by the Commissioner of Health.

The agreement

(See Appendix R for the memorandum of agreement).

HD has agreed with NCEY to collaborate and test alternative requirements for, and routes to, credentials with these objectives:

--Establish a system of upward mobility, shorter and more relevant to HD and its employees than existing routes to professional status, that will provide career progression from PHA to PHN, with an intermediate professional step of JPHN, while employees remain on the HD payroll at full salary.

--To develop a work-study model for training PHA's based on the knowledge and skills required to perform competently at each level so that PHA's can capably assume higher responsibilities and gain recognized credentials.

Developing the model

JOB ANALYSIS

To carry out its responsibility for designing the system for upward mobility, HD has undertaken an extensive analysis of public health nursing tasks and jobs in four health districts in New York City which together encompass prototypes of all of the programs and geographic variations served by its Bureau of Public Health Nursing. The analysis is being conducted by the bureau's associate director assisted by an experienced consultant. The analysis has identified the tasks performed and skills and knowledge required at each nursing level in the bureau.

A committee organized to oversee the job analysis was composed of supervisors, public health nurses, junior public health nurses, senior public health assistants, licensed practical nurses, and public health assistants in the four districts. Selected staff in each district were asked to maintain logs of their activities in one calendar week; from this they compiled lists of tasks they performed.

The committee then analyzed the descriptions and prepared the job analysis, including a listing of skills, knowledge, and training necessary to do the tasks and the percentage of time spent on each task. To date, job descriptions have been completed for public health nurse, licensed practical nurse, senior public health assistant, and public health assistant. The data on junior public health nurse have been gathered but not written up. An analysis of the tasks performed by each title and a plan for redistribution of tasks to the most appropriate level of personnel remains to be completed by the committee and the Bureau of Public Health Nursing.

The increasing diversification of health programs and current trends in the delivery of health care provided the motivation for the job analysis. The intent has double significance and value:

1. To identify actual duties being performed by each level of staff and the skills required to perform those duties.

2. To reallocate on the basis of analysis and evaluation, functions which maximally utilize skills for all levels of staff. (See Appendix S for report on job analysis.)

Selecting college collaborators

We proceeded carefully in approaching potential college collaborators. With the help and advice of our advisory committee, we chose to concentrate our efforts on selecting a unit or units of CUNY. There are advantages and disadvantages to this decision.

At the outset of an experimental program at CUNY, enrollees are likely to be treated as special students for whom tuition is charged, but once they earn a required minimum of credits, they become matriculated students. Free tuition for New York City residents matriculating at CUNY institutions makes their selection advantageous.

CUNY's open-enrollment policy*,adopted in 1970, has overtaxed its colleges' capacities and decreased their ability to support new adult programs. Sharp cuts in city and state higher-education budgets in the past two years have made the colleges' fiscal situation even worse. Outside funds must therefore be sought to defray the colleges' added expenses related to the project. Further complicating the problem of selecting college collaborators has been the extreme crowding of nursing schools.

We considered locating the entire program in a senior college but, after discussion with the advisory committee, decided not to do so. The PHA can qualify after two years of college for the state RN exam. The nursing courses satisfactorily completed at a CUNY community college entitle the student to an AAS degree with credits that the Board of Higher Education has ruled transferable to any CUNY senior college. To strengthen the status of community colleges, CUNY policy does not permit senior-college nursing schools to award AAS degrees (with one exception noted below).

The special Hunter College program that prepares LPN's to become RN's awards only a certificate, and there is no assurance that course credits can be applied in a baccalaureate program.

Community Colleges:

The search for a community college to offer an associate-degree program began in the spring of 1971 and, because of limitations and problems facing the various schools, consumed over 15 months.

The first community college contacted did not show enough initial interest to warrant further consideration.

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*Open enrollment entitles anyone who graduates from a city high school to enroll the following year in a CUNY college.

A second community college considered becoming a collaborator until, in June 1971, the head of its nursing department decided that student unrest which was plaguing the school, difficulties caused by a sudden influx of new students, and demands on department staff to strengthen existing curriculum militated against taking on further responsibilities.

A recommendation by the advisory committee then led to extensive negotiations with a new institution which was about to launch a nursing program and was the only school authorized by CUNY to offer both two-and four-year nursing courses. The college was in the process of employing a nursing education director, and she was not in a position to respond concerning our project until November.

After a long series of discussions and despite the college's interest, negotiations were broken off for two reasons: The start of the regular nursing program was deferred six months on recommendation of state licensure officials, causing a substantial backlog of enrolled students on the nursing waiting list, and an already designed curriculum the faculty wanted to use exclusively for the first four years.

Hostos Community College ultimately became the associate-degree collaborator. Hostos opened in 1970, with a promising program focusing on health careers and with similar goals to NCEY's.

Early difficulties in working toward these goals, a change of presidents, and nursing personnel changes prevented NCEY from attempting negotiations with the college until November 1971. The new president's commitment to cooperative career education, modular study units, flexible year-round scheduling, and individualized student programming appear to enhance prospects of successful collaboration.

Hostos employed a new director of its nursing program in January 1972 and soon thereafter committed itself informally to participating in the project. Its written commitment was obtained two months later. Hostos is now ready to assign a nursing faculty member to work on the project's curriculum design.

Senior colleges: We have approached three CUNY senior colleges and (in case none is available in the CUNY system) two private senior colleges as possible collaborators. One of the two private colleges has a baccalaureate program in a county branch, Westchester, and lacks funds to open one in New York City. The nursing department staff of the other college is enthusiastic about the project but

can give no commitment without the approval of its liberal arts college administration, which controls many of the courses nursing candidates would be required to take. Discussions leading to such approval cannot take place until next September.

Interest has been expressed at all three CUNY colleges, but all have had problems which have prevented us from concluding negotiations. Among these are: administrative turnover, internal curriculum problems demanding prior staff attention, and resistance on the part of some faculty members to involvement in new programs.

Hostos' new nursing department head is initiating contacts with senior colleges of the CUNY system. She is in a better position than NCEY to lead negotiations with them.

Developing the model

A Policy Committee including representatives of the New York City Department of Health, Hostos Community College, a senior college, District Council 37, NCEY, other city agencies, nursing educators, and PHA's, will determine overall program policies and procedures and will oversee implementation of the program.

HD, Hostos, the senior college, and NCEY will jointly develop a curriculum for upgrading PHA's to JPHN's and PHN's. The curriculum will be based on the required skills and knowledge and the work-performance criteria identified in the job analysis. Academic and clinical learning experiences will be sequenced and integrated, relating the knowledge and skills to competence in public health nursing at all occupational levels. The curriculum will be modular, relate theory to practice, and reflect the needs of both students and the Bureau of Public Health Nursing. Emphasis will be placed on a core of knowledge and skills required of PHN's working in community settings. Teaching methods and materials will evolve from the above concerns.

The Department of Health will designate one or more of its health centers as special training centers for this program. In collaboration with the colleges, HD will designate members of its nursing supervisory staff as instructors to work in the training centers. These instructors will be given adjunct faculty status by the colleges so that the work site is incorporated into the accredited nursing program.

The instructors as well as PHA students will receive their regular salaries during the life of the program and will be given sufficient time by HD to participate in the entire program.

HD will arrange for clinical experiences required of the students outside of its training centers, such as in hospitals, nursing homes, and mental health centers. Promotional lines for students will be reserved so that those gaining the AAS degree and passing the RN examination will become JPHN's and JPHN's achieving the BSN degree will become PHN's.

The colleges will implement the curriculum and tailor it to meet the needs of an adult student body. They will offer AAS and BS degree programs which are articulated for maximum effectiveness and saving of time. With the assistance of consultants, the colleges will assess and accredit relevant public health skills, knowledge and experience previously acquired by the students. The colleges will administer and accredit the academic instruction and clinical practice at their institutions and at the clinical sites. They will select learning experiences that build on the students' strengths and lead to the behaviors indicated in course objectives.

The AAS program at Hostos will prepare students for an educative role in the maintenance and restoration of health, as well as a therapeutic role in the care and treatment of illness and disabilities. Hostos will provide facilities and equipment for self-paced learning including programmed instruction, independent study, and individualized experiences that enable students to progress as rapidly as they are able. Students who successfully complete the Hostos course will be eligible to take the state examination for RN.

The two-year program will prepare a first-level RN who under direct supervision will develop the skills to perform the following functions:

1. Give health guidance to individuals and families in homes, schools and clinics.

2. Give and demonstrate or arrange for nursing care.

3. Instruct patients, parents, and teachers in the maintenance of health, prevention of illness, and value of immunizations.

4. Participate with physicians in developing health-care plans for patients.

5. Share information on health matters with all other professional disciplines.

6. Advise families on the care of patients with communicable diseases and on adopting appropriate measures to prevent and minimize contagions.

7. Refer patients to other community agencies and do appropriate follow-up.

8. Keep records and prepare reports.

The baccalaureate program (at a senior college yet to be identified) will focus on the more technical aspects of public health knowledge. Those successfully completing this phase of the program will be awarded a BS in nursing and will have met all of the requirements to practice as PHN's.

The four-year program will prepare a fully qualified PHN who, in addition to being able to perform the above-mentioned functions with greater skills, more depth, and expertise, will develop additional skills required to function in the expanded public health nursing role, such as:

1. Nursing assessment.

2. Establishing a nursing diagnosis.

3. Developing a nursing-care plan with the family.

4. Collecting and analyzing data to improve the quality of care.

5. Directing patients in the use of community resources.

6. Determining the impact and effect of external factors in providing guidance and direction to families.

7. Coordinating patient care to minimize fragmentation.

8. Serving as liaison between the community and the health agency.

9. Recognizing the need for change in policies and procedures affecting patient care and assisting in bringing these changes about.

10. Continuing professional growth through professional affiliations.

The program may be able to utilize the state's external-degree program in nursing, which is presently being developed. State Education Department staff has indicated that some evaluative tools for an AAS degree in nursing will be ready for testing by September 1973. This would enable those people with a state license in practical nursing to take the RN examination, and RN's without academic degrees to obtain the AAS degree. Work will also be done by the state on development of an external baccalaureate degree in nursing, but there is no way of estimating how soon it will be ready for use.

The availability of external degrees could give the program a good deal of flexibility and the students a variety of options, depending on the students' status at the time these degrees come into use. For example, some students might take a program exclusively through the external-degree system, and others might take a program combining the two routes.

The program will be staffed by a coordinator responsible for overall program operation, counseling staff for assisting students with personal and vocational problems, tutors to assist students with tool skills and technical material, and a range of expert consultants for assistance with curriculum design, test development and selection, administration, and program assessment, and in subject areas.

Involvement of the union gives students an additional advocate concerned about their status and progress. The union has agreed to provide, through a special education fund, pre-program tutorial services for strengthening basic skills, including instructors, instructional materials, and classroom space, nine hours a week for eight weeks.

NCEY will provide management-coordination, technical assistance, and monitoring and evaluation services.

The model will operate in the following fashion:

Twenty PHA's employed by HD in schools and clinics will be enrolled annually for a five-year period in an upgrading program to prepare them to become JPHN's and PHN's. They will be selected by the Policy Committee using criteria established by the collaborating institutions. The committee will consider the PHA's motivation, aptitude, academic level, and work history. Interviews, tests, and recommendations of supervisors will be used in making the final selection.

Those selected, who will remain fully employed by HD, will attend an eight-week orientation program designed to assess needs, strengthen tool skills, familiarize them with college-level work and expectations, and provide personal and vocational counseling.

Upon completion of the orientation program, those selected will enter a combined work-study program for up to 24 months which includes formal academic study at Hostos Community College and accredited course work and field practicums at selected HD sites.

Advanced standing with academic credit will be offered to students who can demonstrate proficiency in required knowledge and skills.

Course work at Hostos and the work sites will be based on the curriculum developed from the job analysis, and will integrate academic learning with clinical experiences. Hostos will provide facilities and equipment for self-paced learning so that students may complete their studies as rapidly as they are able.

Instructors will be drawn from existing faculty at Hostos, new faculty to be hired, and HD clinical supervisors. The latter will be given adjunct faculty status at Hostos. Tutoring and counseling will be provided throughout the program as needed by the students.

On successful completion of this phase of the program and on passing the RN examination, students will be promoted by HD to JPHN positions.

Students who choose to remain at this level will be assigned to work full-time at an HD site. Those wishing to continue their education will move immediately into a baccalaureate program of up to 18 months at a senior college.

The basic structure of the first two years will be continued during the senior-college phase, building on knowledge and skills already acquired. The curriculum will emphasize the accumulation and development of public health knowledge and skills and their application in community settings.

Upon successful completion of the senior-college phase, students will receive a B.S. degree in nursing and be promoted by HD to PHN positions.

Starting in the second year of the program, and for each of four years thereafter, ten existing JPHN's will be enrolled in the senior-college phase of the program and prepared to become PHN's. (These ten are in addition to those who advance to JPHN in the course of the training program.)

Funding

The various steps in the development and funding of a training model are ideally taken sequentially, since success at one stage usually depends on successful completion of an earlier one. The requirements of the DOL grant, however, made it necessary to develop the model and seek collaborators and funding simultaneously.

In December 1971, we contacted the National Institutes of Health, Nursing Education Division, to determine when an application could be submitted to fund our model. We learned that the next submission date was January 15, 1972, and that if that deadline was missed, we would have to wait six months to apply.

Though the model was incomplete, several nursing educators on the advisory committee agreed to help us prepare a proposal. They pointed out that we could request a six-month planning period to complete development work before actual operations began. A preliminary application was completed in three weeks and hand-delivered to NIH for pre-submission review. NIH staff's suggestions were incorporated into a rewrite and submitted to meet the January 15 deadline. Minor budget revisions were later requested by NIH and submitted by us in March. Review procedures are to be completed in June, and NCEY will be notified soon thereafter whether funds will be provided.

Seeking an alternative source for start-up funding, we contacted the New York Regional Office of DOL and learned that HD qualifies to apply for support of the project as an Upgrade Component of a Public Service Careers Plan A program. HD officials met with DOL representatives and NCEY staff and asked our help in preparing such an application.

Next steps

Identify and establish formal agreement with a senior college.

With academic collaborators and the HD, complete curriculum development using fundings of job analysis.

Maintain contacts with State Board of Licensure for Nursing.

Maintain contacts with State Department of Education on progress being made in the development of external degrees in nursing.

If funding is approved by NIH, recruit staff, identify training sites, gear up for operational phase.

If funding is not approved by NIH, rewrite application for resubmission in October.

Maintain contacts with the DOL Regional Office for alternative funding under the State PSC program.

CLASSROOM TEACHER MODEL

This model, to be operated with Community School District 9 (Bronx) and a collaborating college, will prepare the district's classroom paraprofessionals to become certified early-childhood teachers responsive to the district's learning objectives for its pupils. Based on competencies needed to teach in inner-city schools, the teacher-preparation program will free the paraprofessionals from time-wasting course requirements and reduce the time and cost of preparing them as accredited teachers. This will give the district more, better-trained, accredited teachers from the predominantly minority community. The model follows New York State Education Department guidelines for "trial projects" leading to alternative, competency-based teaching credentials.

This five-year trial project will annually enroll 30 paraprofessionals employed in the district's early childhood classrooms. To meet the immediate needs of the district, the first-year enrollees will be paraprofessionals advanced in academic credits and demonstrated classroom competency. Without waiting for completion of the new teacher-education design, the collaborating college will enroll them in an existing baccalaureate-degree program adapted for their educational needs and utilizing new design as feasible. The program is expected to halve the time they will need to become certified teachers.

After the first year, enrollees will be a mix of paraprofessionals at various steps on the career ladder who will be prepared for a baccalaureate degree and teacher-certification in the new competency-based model. Two selected schools of the district will serve as laboratories. Early-childhood teachers in these schools, as adjunct college teacher-training faculty, will help design and provide college-accredited "hands-on" training in the classroom, as part of the college curriculum.

A "Parity Board" to set policy for the design and operation of the program will include representation from the school district; its teachers, student teachers (paraprofessionals), and community; the collaborating college, and NCEY. The Parity Board will define pupil learning objectives and then identify teacher behaviors and competencies for meeting these. The curriculum will be designed to develop knowledge, skills, and understandings needed to meet performance standards. It will use existing assessment measures and new ones for continuing assessment of students and for advanced standing and exemption from required courses.

Each entering group of student-teachers will begin training in a college-accredited workshop including the program's college and District 9 teacher-training faculty. Workshop participants will work as peers in developing and refining the model. After three years of trial, it is anticipated that the model will be incorporated in the college's regular teacher-education program.

The need

Teaching is the largest human-service profession. According to the Bureau of Labor Statistics, 2,170,000 elementary and secondary teachers were employed nationally in 1970.

The Occupational Outlook Handbook (1970) estimated a need for 56,300 new teachers each year to 1980 but said the supply may exceed openings if present enrollment projections and trends in numbers of newly trained teachers continues. While the general supply-demand situation was unclear in 1970, there were severe shortages of teachers with special competencies in a number of areas, including early childhood education, special education, and bilingual education.

A critical problem is the recruitment of teachers for low-income, predominantly minority school districts in large cities, particularly New York. The city's low-income areas needed 6,750 new teachers annually as of 1970--more than 12 percent of the entire national need projected by BLS, though the city has but 3 per cent of the nation's population.

The paraprofessionals to be upgraded

Classroom paraprofessionals have been recruited from the poverty neighborhoods, employed largely through funds provided under Title I of the Federal Elementary and Secondary Education Act (ESEA) for assistance to schools in low-income areas.

School boards and administrators and parents in these areas have increasingly been demanding teachers from their own communities who understand the life-styles of the residents and their educational problems, who want to teach in inner-city schools and are prepared to cope with students' learning problems. In 1970, 38 per cent of all New York City public school students were white, 34 per cent black, and 26 per cent Spanish-surnamed. Data are not available on the ethnic distribution of teachers for 1970, but a newspaper article reported the distribution in 1972 as being 8 per cent black and 1.3 per cent Spanish-surnamed. It is highly unlikely that the representation of minority teachers was higher in 1970.

Paraprofessionals have demonstrated their capability, knowledge of the problems faced by teachers, and desire to work in inner-city schools. But their opportunities to train as certified teachers are limited. Neither courses nor certification requirements are designed for mature adults employed in school settings. Little or no provision is made for assessing what they already know or for differentiating their educational needs from those of young high-school graduates.

New York City's Career Opportunity Program for paraprofessionals has innovated course structures but not changed credential requirements. Career-ladder provisions in union contracts* represented important gains but did not eliminate several serious drawbacks in the Board of Education's promotional practices:

--Advancement to certified teacher depended on completion of traditional academic courses, with little credit for work experience.

--It takes eight years or more to earn the degree under the Board of Education's contract with the City University of New York (CUNY) to pay for up to 15 credits per year for paraprofessionals in part-time study toward the 128 needed for a baccalaureate degree.

Present requirements

Provisional certificates for early childhood teachers, valid for five years, require a baccalaureate degree including 24 semester hours of professional study, six of which are in the teaching of reading, and a college-supervised teaching experience, or one year of full-time paid teaching experience at the level for which certification is sought, and the recommendation of the employing school district administrator.

For permanent certification a master's degree is required in teaching service or related fields, or 30 graduate semester hours of study distributed among the liberal arts, the social and behavioral sciences, and professional study in education. This includes one year of student-teaching or of paid full-time teaching experience under conditions as specified for provisional certificates.

Feasibility of changing requirements and routes to credentials

Before selecting teaching, NCEY explored the climate for changing the content and requirements for teaching credentials at the national, state, and local levels.

*With the United Federation of Teachers (UFT), bargaining agency for classroom paraprofessionals, and District Council 37, American Federation of State, County, and Municipal Employees (AFSCME), representing family workers and other non-classroom auxiliary personnel.

At the U.S. Office of Education, staff administering the Education Professionals Development Act informed us that USOE has stimulated efforts in a number of universities and state education departments to work toward changes in training content and credentials. These include studies on performance criteria for teacher training and certification.

At the state level, we learned that the teaching credential was being reexamined. The state was preparing to invite ten local coalitions (each including a school district, teacher-training institution, teacher representatives, and student teachers) to develop "trial projects" leading to alternative, competency-based credentials. Such a project would be ideally tailored for NCEY's objectives if we could bring together a school district and a college ready to work within its framework. Unfortunately, we were not able to assemble a trial project in time to be selected as one of the ten. But the fact that ours was the only plan for a project to train paraprofessionals to become teachers greatly interested certification officials, and NCEY has been assured that it can proceed to launch a demonstration which follows trial-project guidelines with the full cooperation of and staff assistance from the State Bureau of Teacher Education and Certification.

At the local level, it became possible, as our project began, to develop alternatives for New York City teachers without a frontal attack on local licensure procedures. The New York City school system was decentralized into 33 school districts under legislation enacted as of July 1970. This legislation also eliminated special city licensure for teachers in low-achievement schools. Previously, all city public-school teachers had to pass examinations given by the City Board of Examiners.* The new law permits community school boards to hire any state-certified teacher for schools with average reading scores two or more years below the national norm. About 40 per cent of all elementary and junior-high schools in the city (a total of 313) were in this category in 1970. In some districts, all schools were.

Selecting an employer-collaborator

Finding an employer-collaborator was greatly complicated by the fact that the process began in the year school decentralization started. NCEY had to decide early whether to seek the central board of education or a community school district as a collaborator. We opted for the latter, with the chance that central board approval might also be needed eventually, for three reasons:

*In addition to meeting prerequisites essentially the same as the state's certification requirements, teachers licensed by the New York City Board of Examiners must pass written, oral and physical examinations.

--Community school boards control allocation of funds for hiring paraprofessionals, determine hiring practices, and make school staff appointments.

--Local licensure could be avoided by working with districts whose schools were exempt from it.

--State trial projects required community involvement, which is possible only at the school district level.

The fledgling districts needed time to pull themselves together administratively and politically, however, before they could consider collaboration with NCEY and meet resulting commitments.

By the end of 1970 various sources had recommended three districts for their interest in innovation. One proved to be a middle-class Queens district not appropriate for the project. Its teacher turnover rate was low, and only two of its 21 schools met the criteria for hiring outside of city licensure. A Manhattan district included a substantial low-income area, and its key staff expressed considerable interest in working with NCEY. But negotiations fell through after several weeks because of many other higher-priority demands on the district.

One district in Brooklyn had been looking on its own for ways to speed teacher preparation for paraprofessionals. Discussions there began in December 1970. By the following April, NCEY had a verbal commitment for collaboration from its superintendent. For nine months we worked with district representatives on model development, college collaboration, and funding an operational program. But in January 1972 we had to sever relations with the district because we could not get the quality and quantity of cooperation needed to make this program succeed.

NCEY staff subsequently considered collaboration with seven other districts. Some proved unsuitable because of political and other internal tensions. Others were uninterested because they felt no need or desire to hire teachers with state certification in lieu of city licenses.

District 9, in the Bronx, was finally chosen because of its receptivity to carrying forward NCEY's project, its record of innovative approaches, and its reputation for action in line with its convictions. Before signing an agreement, we consulted state certification officials and were encouraged to follow through on our plans with District 9, using the trial-project guidelines.

District 9, covering the Morrisania, Concourse, University Heights, and Highbridge areas, is a designated poverty school district. All of its 25 schools receive ESEA Title I funds. The student population of 36,000 is 45.3 per cent black, 42.9 per cent Puerto Rican, and 3.0 per cent other Spanish-speaking. The district, one of the city's fastest growing in pupil population, has about 1,900 teachers and 600 paraprofessionals.

COLLEGE COLLABORATOR FOR THE BROOKLYN SCHOOL DISTRICT

While negotiations were in progress with the Brooklyn district, we held discussions with eight colleges. At one, considerable interest was shown by administrators of the education school but little by liberal-arts administrators who controlled degree requirements. Another appeared unready to change its accrediting methods to include assessment of knowledge gained outside conventional courses. It continued to require 128 credits or transfer credits from recognized institutions for the baccalaureate degree. A third, located out of town, said it would gladly consult in the development of a teacher-education model and cooperate with a local institution in program operation but could not afford to initiate an independent program in New York City.

A fourth college offered to include project enrollees in teacher-education courses then available but said further changes would be too costly to plan and operate. A fifth showed much interest in working toward a flexible teacher-education curriculum and examined the trial-project guidelines. But its reservations about the academic backgrounds of the students led the college to suggest that the paraprofessionals undergo community college training before enrolling, a requirement that NCEY considered an underestimation of the students' capacities and an indication of unreadiness to change teaching approaches for these students. A sixth considered collaboration with NCEY but decided that its education program was insufficiently staffed. Promising contacts had begun with two Brooklyn colleges when relations with the Brooklyn school district were severed.

UNION INVOLVEMENT

The United Federation of Teachers, which represents both classroom teachers and classroom paraprofessionals, has been kept informed of our actions and its advice has been sought concerning specific planning.

Collaboration with community school district #9

The agreement:

A formal agreement was signed by the district superintendent March 31, 1972 (see Appendix U).

The district agreed to help develop and apply the basic model, use selected district schools as the demonstration laboratory, assign district teachers to the instructional team under the collaborating college's supervision, pay the enrollees their full salaries during training, promote project graduates to teaching positions, and cooperate with NCEY in efforts to obtain additional funds for an operational demonstration.

NCEY agreed to take responsibility for obtaining, with the district's assistance, a college collaborator or collaborators, supply consultant help to the district, take major responsibility for obtaining operational funds, and provide technical assistance and program evaluation when the project was operational. Consultant aid would include preparing materials for the policy board, arranging orientation workshops, and analyzing the district's teaching objectives and priorities.

Utilizing the basic concepts outlined in NCEY's previous work with the Brooklyn district, we collaborated with District 9 in developing the model for a trial project in teacher preparation.

The objectives of the model trial project are:

A. To improve the academic achievement of pupils in the district's early childhood classes by designing and implementing a teacher-preparation program responsive to the district's learning objectives for its pupils.

B. To open to paraprofessionals employed in District 9 classrooms an alternative route to certification as fully qualified teachers which is realistic, shorter and more economical than presently available teacher-training programs, and will produce teachers with the knowledge, skills, sensitivity, and understanding needed to achieve specified pupil learning objectives.

C. To meet the public-education needs and aspirations of the community by regularly channeling its input into defining program goals, developing the teacher-education model, guiding its operation, and assessing its results.

D. To use a partnership of the community, the school district, the teachers of the district, the student-teachers, a college, and NCEY to design, implement, and assess the model trial project in early childhood education; to establish as a permanent feature of the new teacher preparation design a parity board of the partners as the governing body of this project.

E. To develop and test a replicable teacher-preparation model in line with the current movement toward performance competency, as the basis for certification.

F. This is a five-year trial project designed to meet the immediate and long-term needs of District 9 by enrolling five successive groups of 30 paraprofessionals per year (Groups I-V).

To meet the district's long-term needs, a model program to prepare early childhood teachers will be designed and offered, beginning in Year 2 of the project, to paraprofessionals employed in the district's early-childhood education classrooms. In Years 2 through 5, the 30 enrollees per year (Groups II to V) will be a mix of paraprofessionals at various levels of experience and study directly related to teacher preparation. The program will enable the students to earn 32 credits per 11-month year.

To meet the immediate needs of the district, in the first year a group of 30 paraprofessionals from its early-childhood classrooms will be selected who have already completed substantial academic requirements and have demonstrated considerable competence in the classroom (enrollee Group I). At the current pace of existing career ladder programs, these paraprofessionals would require two to four years of further study.

Without waiting for completion of the new teacher-preparation design, they will immediately be enrolled in an existing baccalaureate program leading to teacher certification, adapted to meet their special educational needs, with whatever newly-developed procedures and techniques can be introduced. They will progress toward the degree as rapidly as they are able (probably in one calendar year for some, up to two for others). Those who attain certification in one year will continue in the program as graduate students to further improve competencies to be emphasized in the new teacher-training model.

Essential features of the model are:

--Establishment of a Parity Board to set policy for the program and include representation from the community, the school district, its teachers and student teachers (paraprofessionals), the collaborating college, and the coordinating agency (NCEY).

--Definition by the Parity Board of pupil-learning objectives for the early-childhood classes in the district, and identification of those teacher behaviors and competencies which appear to insure the realization of these selected learning goals.

--The design and implementation of a competency-based teacher-preparation model, utilizing a curriculum geared to development of knowledge, skills and understandings required to meet performance standards.

--The designation and training of 15 district classroom teachers as adjunct college faculty to provide "hands-on" teacher training experience for the paraprofessional student-teachers. The classroom teacher-trainers are to receive compensation as well as graduate credit for their development of skills in teacher training.

--Selection of two schools of the district to serve as a laboratory in which the student-teachers and teacher-trainers will function in classroom settings.

--The continuous assessment of student-teachers' proficiency through the use of existing assessment tools, techniques and procedures and the development of new ones which offer performance criteria for academic subjects and the professional sequence. The use of existing assessment tools and new ones as they are developed to offer exemption from specified course requirements.

Steps to design the trial project

1. Develop learning goals for children:

   a. Teachers, District representatives, parents, community representatives and students offer experience-based views.

   b. Consultants prepare a working paper based on views expressed in (a).

   c. College resource personnel, district representatives and NCEY summarize options available.

   d. Parity Board reaches consensus on specific learning goals.

2. Identification of teacher competencies:

   a. Study of Child Development Associate model developed by Office of Child Development, work of CUNY Competency Committee in Early Childhood Education, University of Florida model, and others. (See Appendix W, Bibliography of Teacher Behavior and Competency Studies.)

   b. Observe and analyze classroom activities and behaviors in District 9 and elsewhere, modifying and applying instruments developed by NCEY from OCD model (See Appendix X.)

   c. Hold workshop for classroom teachers, student-teachers (paraprofessionals), parity board representatives and college faculty to begin to identify the competencies related to District 9 pupil objectives.

   d. Parity Board discusses and reaches consensus on teacher competencies.

   e. College personnel prepare a list of competencies to be operationalized in teacher-behavior terms.

3. Assessment of teacher competencies:

   a. College personnel prepare proposed assessment techniques and instruments.

   b. Parity Board revises, modifies, and adopts assessment procedures.

4. Design of new teacher preparation curriculum:

   a. District personnel, teachers and students, College personnel and NCEY staff collaborate in fashioning new design.

   b. College personnel prepare written form of new design, subject to approval by Parity Board.

Implementing the model

The Parity Board's role: The Parity Board will continue to set policy, will review and approve the new model and subsequent modifications and be responsible for ongoing assessment of the process and product of the trial project.

Workshops: Operations will begin in fall of 1972 with a workshop involving the 30 Group I student-teachers, and District 9 classroom teachers designated as teacher-trainers.

and the college faculty assigned to the project. The workshop's purposes will be to help participants establish working relationships, initiate training for teacher-trainers and paraprofessional student-teachers, and begin work on identifying teacher competencies for realization of pupil-learning objectives. College faculty, District 9 teacher-trainers, and student-teachers will participate as peers under the guidance of workshop leaders. Participating student-teachers will receive six college credits for attending this workshop and subsequent ones. The 45-hour workshop will prepare faculty and students for their roles in a full teacher education program for these students beginning in February 1973.

A summer workshop will take place as each subsequent group of student-teachers enters the program, through the summer of 1975. In addition to faculty and entering students, these workshops will include already enrolled student-teachers or graduates of the program. Workshop members will participate in developing, refining or evaluating the new model.

College's role: During Year 1, the college faculty in collaboration with the other partners will have responsibility for operating a college-accredited program to meet the project's short term goals while developing the model for its long-term goals. To meet the short-term goals, the college faculty will supervise the on-the-job training, coordinate the OJT experiences with college courses, assess and give college credit toward the baccalaureate degree for professional performance and proficiency and knowledge in academic areas, select appropriate existing assessment measures, and begin to try out new ones.

To meet the long-term goals, the college will develop and use a curriculum to meet the specifications outlined by the Parity Board; develop and use new assessment tools, techniques, and procedures that will measure students' performance, proficiency, and knowledge; establish procedures for evaluating the effectiveness of the model and its effect on pupil learning; and process the new curriculum through college channels for approval.

Curriculum refinement will continue throughout the five-year trial project.

District 9's Role

Two schools in the district will be selected as laboratories for conducting "hands-on" teacher training in early childhood classrooms. Teacher-trainers from the district will be early-childhood teachers in these schools, and the student-teachers will be assigned to them for college-accredited on-the-job training. The teacher-trainers will provide practical learning experiences for the teachers and cooperate with college faculty in coordinating practicum with didactic learning.

Teacher-trainers will be adjunct faculty of the college and will participate with other college faculty in planning, refining, and using the teacher-preparation curriculum.

District 9 will arrange schedules of teacher-trainers and student-teachers for full participation in the program and will retain both on full salary throughout the training.

NCEY's Role:

Throughout the five-year model trial project, NCEY will continue technical assistance and external audit of the program.

Schedule for developing and testing the new model trial project

Selection of the teacher-competencies to be emphasized in the new model will begin in the fall of Year 1 workshop. The new model is to be developed by May of Year 1 and submitted to the Parity Board for review, modification, and approval. It will then go through college channels for approval.

The initial year of field trial for the new model begins with Group II student-teachers in the summer, one workshop at the end of Year I and continues throughout Year 2. In May of Year 2, revision of the model will be proposed to the Parity Board. Those approved will then be submitted to college authoritics for approval.

It will be further tested and revised in Year 3. After that, it is anticipated that the new design will be incorporated into the college's regular teacher-preparation program.

Evaluation

A management information system will be established to provide continuous data on student progress and interrelationships of program components, to determine accountability for each aspect of the program, and to provide a basis for program evaluation.

Ongoing data collection will facilitate formative evaluation:

a. Videotape samples will be used for self-guided analysis by paraprofessional student teachers and the teacher-trainers.

b. Competency assessment data, collected by the partners, will periodically be made available to the Parity Board to gauge pace and direction of the new teacher-prepration curriculum.

c. Pupil progress toward learning goals will be assessed.

d. Continuous redesign will reflect the accumulated experience and knowledge of the partners, as the field trial is run.

A brief preliminary evaluation will follow one semester of the field trial, with Parity Board decisions on revision needs. A full-scale evaluation will occur at the end of Year 2, after one calendar year of field trial of the new model. Evaluation institutes will take place in the summers following Years 3 and 4. Final evaluation and report will be completed at the end of Year 5.

Selecting a college collaborator

Work had to begin anew in April 1972 to find a college geographically and educationally able to meet the teacher-preparation needs of District 9 paraprofessionals. We have sought out colleges of the City University system because the Board of Education-CUNY contract can be applied to pay for up to 15 of the project enrollees' credits per year.

City College has reacted favorably but probably cannot provide staff before the spring of 1973. The most positive response has come from Bernard M. Baruch College, whose education department has developed a related teacher-training program for paraprofessionals this year. The chairman of its education department and coordinator of early childhood programs have worked actively with NCEY and District 9 to develop specifics for a collaborative agreement.

Funding

Interest in supporting the project costs has been expressed by both local sources and the Ford Foundation.

Local sources include the provision in the Board of Education-CUNY contract for payment for up to 15 undergraduate credits per year and Federal teacher-training funds channeled to the city to pay for summer workshops. Other sources must fund undergraduate instruction covering another 10-15 credits per year per student. The amount of money needed is subject to negotiation with the college. College administrators have suggested in recent discussions that this cost may be higher than we have anticipated--perhaps up to an additional $70,000 per year to provide the individualized program and student supports for 30 enrollees.

Support was first solicited from the Ford Foundation in August 1971. Ford's interest is contingent on the project's offering training that produces innovative, untraditional teaching approaches and does not duplicate efforts that Federal funds could support. In that event, Ford would consider paying for the costs of developing and testing a new role for the teacher-trainer and the development and implementation of an

innovative curriculum.

We have not been able to determine what funds will be directly available from USOE, which is currently redirecting its resources. Most of USOE's discretionary funds (those not allocated by formal grants to states and cities) will apparently go to districts designated as "educational renewal sites." This may be a source of revenue for our project, since District 9 is one of three New York City school districts nominated by the state for this designation. But it is not yet known how many nominees USOE will designate as ERS's, what funds they will get, or when.

At the Manpower Division of the Office of Economic Opportunity, we have established that the upgrading of public service paraprofessionals from poverty backgrounds is an area of special interest. We will follow this lead with a written proposal.

We are exploring other resources through the State Education Department and the applicability of Public Service Careers funds from the regional office of the U.S. Department of Labor.

Next steps

Complete a collaborative agreement with a college.

Locate funds for operating the project.

Complete plans for the first-year program.

CHILD DEVELOPMENT CARE WORKER MODEL

The model for child development teachers being designed in collaboration with the New York City Agency for Child Development (ACD) is significant in a field expanding so rapidly that both the quality of child care and the flexibility necessary for obtaining staff are at issue. It can strongly affect staffing patterns and requirements, particularly since ACD will be determining staffing and standards for all pre-school services in New York City outside the Board of Education and will be responsible for the employment of very large numbers of personnel, and whatever precedents it sets will have far-reaching influence throughout the country.

We were quickly able to establish a vast need for workers and a specific role for the NCEY project in helping formulate more rational staffing patterns and credentialing methods. But the usual lag between growing need and the creation of new institutional forms has slowed our pace in cementing collaboration with ACD, an appropriate college child-care program, and individual centers to become testing grounds for a project.

With consultant help we have produced and done preliminary pre-tests of task-analysis materials with great potential value for:

--Specifying the role of the Child Development Associate, a new job title proposed by the Federal Office of Child Development (CCD) within staffing patterns of operating centers, and

--Defining and assessing the competencies to be acquired by workers training to become CDA's and required for further advancement.

The model being developed for this field has several major objectives:

1. To clarify the functions of child-development-care staff at various levels and define competencies needed for accomplishing child-development objectives.

2. To develop staffing patterns flexible enough to enable community groups to staff their centers with personnel who in their opinion best meet the needs of the children concerned.

3. To develop a curriculum for child-development-care workers that provides a balance between experience in working with children and didactic education and training.

4. To develop instruments that will determine competence and skill levels of child-development-care center staffs for placement, accreditation, and advancement.

5. To open career opportunities for the paraprofessionals by enabling child-development-care workers to obtain credentials within the structure of an associate degree and to have the option of going on to attain a baccalaureate degree in an articulated program.

The need

The greatly expanded demand for day-care programs for pre-school children stems from many sources--large and increasing numbers of mothers in the labor market, President Nixon's proposed Family Assistance Plan, and other moves to employ women Welfare recipients, day-care legislation before Congress, welfare mothers' organizations, the Women's Liberation movement, unions, industrial firms, and others.

Many kinds of child-care centers have mushroomed: Community-organized and staffed ghetto operations, Head Start centers, Board of Education-sponsored programs, and even a national firm promoting day-care franchises in middle and high-income housing.

The Senate Labor and Public Works Committee has reported that more than 5 million pre-school children need full or part-time day-care services while their mothers are away from home, yet there are fewer than 700,000 spaces in licensed day-care programs to serve them.

Outlays of as much as $10 billion annually for child care by 1980 were proposed at the 1970 White House Conference on Children. The growing attention accorded the needs of working mothers by both public and private agencies and organizations leaves no doubt that increasingly large sums will be spent on such programs in the next few years.

The need for personnel is immense. A potential national need for over 400,000 professionals and 500,000 paraprofessionals, assuming optimal growth, has been estimated by Jule Sugarman, former Head Start director and now Commissioner of the New York City Human Resources Administration (HRA). He reports that only 5,000 college graduates enter the field each year and 10,000 pre-professionals are now trained annually. Expansion of existing college facilities can yield no more than a 10 percent annual increase in graduates. At that rate it would take over 25 years to meet the demand for graduates fully, with little capability to train the pre-professionals needed.

In New York City, child care is expanding rapidly. Besides Board of Education-sponsored programs, there were in 1971 between 150 and 200 Department of Social Service day-care centers, 122 Head Start centers, and about 1,000 homes used for family day care. A plan adopted in 1971 to double child-care services in a year was backed by a doubled budget allocation for child care while most other human services were being cut back.

A number of new community-day-care centers is meeting mothers' demands for both custodial care and improved pre- and after-school educational experiences. Sixteen new child-care programs had been funded by HRA as of 1971 and about 20 applications were pending.

The kind and quality of care to be provided is a major issue, locally and nationally. A key question in resolving it is the extent to which the daily experiences given children by child-care staff enhance their healthy growth and development.*

Present requirements

The official credential for day care (child-development) teachers in New York State is an Early Childhood Education Certificate issued by the State Education Department. The Early Childhood Education credential was designed for the public schools, where cognitive skills and formal classroom structure have been emphasized far more than child development or less structured activities more suitable for pre-school programs.

In New York City, Board of Education-sponsored programs must be staffed by teachers licensed by the school system's Board of Examiners. In other centers, staffing requirements include several alternatives in recognition of the personnel shortage. The City Health Code requires teachers in all other child-care programs to have Board of Education licensing or state certification or eligibility for state certification or certification by an agency issuing the equivalent of a state certificate. If no teacher can be found who meets any of these alternatives, the code permits hiring of a person who has a plan for acquiring a B.A. in a "reasonable" time. A center must have at least one teacher who fulfills the above requirements.

Evidence of readiness for change in the field

Paraprofessional Child Development Care Workers

Strong impetus for day care has come from Federally funded

* Evidencing their concern over this question, local and Federal officials have adopted the term "child-development care" in place of "day care" or "child care."

poverty programs under OEO (e.g., Head Start and other community action programs), staffed largely by community paraprofessionals. Communities on whose initiative day-care services were established, despite municipal inertia and extremely rigid health codes, want to retain local control and to continue to employ community staff. By now, many of these staff have relevant experience that is not part of the preparation of credentialed teachers. A new kind of training and credentialing is needed that insures quality of care for children without irrelevant requirements.

Child Care Associate

The Federal OCD, created by Congress in 1970, is responsible for a concerted national effort to upgrade quality while encouraging expansion of child-development services. The Child Development Associate concept delineated for OCD by child-development experts bases the worker's credential not on courses taken or units acquired but on demonstrated competency to assume primary responsibility for the education and development of a group of young children. The CDA project will promote the training and credentialing system based on this concept for persons already working with pre-school children and those planning to enter the field. OCD is hopeful the project will legitimatize on-the-job training for child-development staff and encourage existing programs to convert to competency-based training. The academic component of CDA training is being proposed at the two-year (community college) rather than the four-year college level.

OCD describes the Child Development Associate as a competent professional person who is knowledgeable about pre-school children, can provide valuable experiences for them, and is capable of taking responsibility for the daily activities of a group of young children in day-care, Head Start, and parent-child centers, private nursery schools, and other pre-school programs.

The CDA is not expected to work in isolation. Traditionally, programs for young children have differential staffing including paraprofessional aides and teacher supervisors. Every effort must be made to continue to plan for differential staffing.

OCD's delineation of the CDA's professional role is based on the assumption that she/he will:

--Have available and be in close contact with more trained and experienced staff members (e.g., a master teacher) to provide personal and professional support;

--not have direct responsibility for the extended activities of the educational service; and

--have the assistance of a paraprofessional aide or staff helper.

Creation of the Agency for Child Development

As of 1970, New York City decided, on the recommendation of a broadly based Task Force on Child Development, to establish a centralized Agency for Child Development under HRA, with responsibilities for funding and setting standards for staffing, training, and programming for all child-care centers except those under the Board of Education. ACD's goal is to foster quality care by competent staff while allowing wide latitude in the staffing of centers to reflect community needs. Therefore, the staffing of centers and the training of workers is undergoing thorough re-examination.

Reaching Agreement with ACD

In conferences in the Fall of 1970 involving NCEY staff, the HRA commissioner, and the chairmen of the Task Force and its subcommittee on training and new careers, all suggested a significant role for the NCEY project in helping ACD. The agency needed help particularly with the difficult problem of constructing training models that would provide quality and flexibility and could lead to recognizable, transferable credentials for child-care staff.

From expression of interest to official agreement to collaborate took until September 1971 because of the protracted process needed to set ACD in motion: Appointment of a commissioner (January 1971), completion of policy recommendation by the Training and New Careers subcommittee (due in January, finished in May 1971), and City Council action to establish ACD (July 1971). The collaborative agreement, first discussed with Commissioner Georgia McMurray in January, was signed September 17, 1971.

The agreement

ACD agreed to use its Child Development Commission, parents, board, and center staffs to develop:

--Staffing patterns for a selected sample of its centers, based on analysis and definition of optimal functions of staff to meet the centers' goals;

--Specification of skills and knowledge required for job performance at increasing levels of competence and responsibility, to form the basis of training;

--Objective methods of assessing job performance; and

--A system of upward mobility designed to enable paraprofessionals to assume higher levels of responsibility and gain credentials with the greatest possible economy of time and money.

A senior member of ACD's central administrative staff was assigned responsibility for carrying out its commitment to the project and serving as liaison with NCEY.

NCEY agreed to design a training model emphasizing on-the-job training, credit for previously gained knowledge and skills, and innovative academic curricula and training methods, and to involve an academic collaborator(s) and state authorities responsible for licensing, accreditation, college proficiency examinations and external degrees.

Developing the model

Task Analysis

One of NCEY's consultants is an early childhood educator who had a major role in developing the CDA concept; another is a personnel expert with considerable experience in job-analysis, training and measurement of competence. They have developed a task-analysis guide which will be used to determine worker competencies in child development programs. Trained interviewer-observers will use the guide in cooperating centers to collect data on tasks performed by all personnel working directly with children and persons supervising these workers. These data will be analyzed to determine who does what, to structure and classify jobs, to identify levels of competency and to develop training programs for improving performance and for advancement.

Each job will be defined in terms of major functions (for example, provide for physical safety, health and comfort of the child), the tasks of which these functions are comprised and the activities involved in carrying out each task. The skills, knowledge, abilities, and decision-making* employed at each job level for each activity, task and function will be measured. Using this approach, we will determine the minimum qualifications necessary to perform a given job satisfactorily and the training needed by workers to reach these levels.

* The SKAD system is being used: Skills to perform an activity, knowledge and understanding to perform tasks, ability to carry out the tasks, and discretionary (decision-making) demands of the job.

The consultants developed this instrument (Appendix X) after analysis of the CDA competency report prepared for OCD, and a field trial of the task analysis approach at a child development care center. Three interviewer-observers are being trained. We will be ready to conduct the task analysis at cooperating centers as soon as the centers have been selected.

Selection of Centers

The size of group centers varies greatly. Some serve as few as 15 children. Newer ones tend to be larger, some accepting as many as 250. Some centers serve infants under age two; some serve only pre-school children (3 to 6); some have infant and pre-school programs, and others also have after-school programs for school-age children.

Programs vary from extreme informality to a high degree of structure and, in staffing, from an egalitarian approach (staff of one center visited were all paid the same rate regardless of education and experience) to rigid differentiation of duties and pay. Some centers meet standards and some do not.

To determine criteria for selecting child-development centers to serve as "laboratories" in the demonstration, NCEY staff visited a sampling of the various kinds of group centers (15 centers) and conferred with city officials and lay and professional leaders in the field.*

Criteria for selecting centers were set on the basis of our exploration and subsequent discussion with ACD liaison staff. The centers must:

1. Include infants (in at least one instance)

   There is a generic core of knowledge based on the ways human beings develop and the various factors that influence the rate and quality of the individual child's maturation. Isolating by age the experience of children and the skills and knowledge needed to teach young children creates a misleading distinction. If one realizes that different children at the same chronological age develop and mature at different rates, an effective teacher of young children must have a comprehensive understanding and knowledge of all phases of life for the developing child.

* We decided to select group centers only rather than family day-care programs because the latter differ greatly from the group centers in staffing and structure.

2. Be willing to participate actively in a task analysis and, on the basis of the analysis, possibly modify existing staffing patterns so that there is some gradation of levels of responsibility based on skills and knowledge needed at different levels.

It is recognized that there must be flexibility and that a rigid hierarchy of levels of responsibility and narrowly defined job descriptions are impractical and undesirable. Job status, training, and salaries should be geared to competencies. Each staff member must be allowed to move freely within the system.

3. Be generally flexible and open and willing to try innovative approaches to staff training.

They must (1) agree with the project's goals; (2) be willing to participate actively in developing plans to reach these goals; and, (3) be enthusiastic about carrying out these plans in an operational phase of several years. They must have a relatively stable administration and board and the respect and cooperation of their communities, and a demonstrated record of accomplishment.

4. Be able to assure promotional positions after training to persons who successfully complete the NCEY program.

5. Represent a cross-section in size--small, medium, and large--which can yield a total of 20 to 25 students. The number of centers preferably should not exceed four.

6. (All else being equal) be in close geographic proximity to one another and, if possible, close to the academic collaborator.

7. (All else being equal) have relatively good financial resources for staff training and upgrading.

Final selection of centers must await the selection of a collaborating college.

Locating a college collaborator

Leads to colleges interested in child development care came from our ACD liaison and CUNY central-office education staff.

Several private institutions and CUNY colleges were explored. We met with officials of two private institutions expert in the child-care field. Besides the problem of their high tuition, neither is able at present to give a baccalaureate degree. Both

may be in a position to do so later, but it seemed unwise to wait for this.

None of the community colleges had an ongoing program specifically in child care. The CUNY-senior-college education departments had been concentrating on preparing teachers for public schools with emphasis on more structured learning situations and the cognitive skills expected of school-age children. Child-development (pre-school) programming at community and senior colleges was at the early planning stage. The colleges recommended as most promising would not be ready to discuss plans with us until late April 1972.

As of May 1972, we have begun discussions with two senior colleges and one community college seriously interested in working with us. None are now training pre-school personnel, but all three have begun preparations for doing so.

As the development of the project proceeds, we are concerned that:

--Our task-analysis results be applied to the curriculum design;

--The model be more oriented to accrediting training in the centers than existing programs in senior colleges are;

--There be an accredited stopping point for the CDA below the baccalaureate level;

--The community-college program be articulated with a senior-college one for the benefit of enrollees who want baccalaureate degrees;

--Center supervisory staff become an integral part of the instructional team in order to apply the trainees' newly learned competencies im the work setting.

The new CDA credential, whose precise definitions are still to be developed, is raising many questions for institutions planning to train child development workers. CDA appears roughly equivalent to a two-year college level of preparation, with a national credential obtainable without a formal associate degree. Since the CDA is intended to be the backbone of professional child development center staff, relatively small numbers of more highly-trained personnel would be needed for supervisory or education-specialist positions.

State and Federal officials are encouraging two-year colleges rather than four-year ones to assume the major training role in cooperation with child development care centers. Senior colleges

are having trouble rethinking their role. Child-development officials tend to give them a different message today than last year, when the baccalaureate degree was emphasized more often as a transferable credential for child-development-care workers.

Some child-development officials have mentioned to NCEY that two-year colleges training CDA's may be required to articulate their programs with senior colleges to insure that career options are open to the CDA. We think that such articulation is important, and that senior colleges should be considering the acceptance of the CDA credential in lieu of the associate degree. There is an important role for senior colleges in training center leaders as child-development specialists and as trainers.

The danger to be avoided is unnecessary over-credentialling of workers who have neither the need nor the desire to go beyond the CDA. Sources of this danger are educators unready to accept changes in the existing early-childhood education credential and colleges looking for financial relief by training pre-school teachers at a time when education majors are having trouble finding public-school jobs.

Funding

We have not been ready to apply for operating funds in this field but have explored potential resources. Locally, ACD makes funds available to centers for training of child-development personnel. It uses funds from Title IV of the Social Security Act, supplemented by state and local support, in the ratio of 75 percent Title IV, 25 percent state and/or local. To be eligible, established centers must continue to meet city-health-code standards for staff and facilities. ACD has given "interim" status to a number of existing community-sponsored centers that could not meet all standards, expecting they would be able to correct the deficiencies in a reasonable time. To help them do so, ACD gives technical and financial assistance in improving facilities and funds to train staff at a higher rate than continuing centers can receive. (For example, as of January 1, 1972, interim centers were eligible for $230 per pre-school child enrolled; $150 per school-age child. Continuing centers eligible for training funds received $150 per child.)

Funding will be sought for the additional costs of training under the demonstration such as student tutoring, counseling and on-the-job supervision of trainees.

One possible source is the State Division of Occupational Education, which supports two-year college programs with funds provided under the Federal Vocational Education Act of 1968.

At the Federal level, a limited number of pilot training programs will be funded by OCD. Subcontracts for competency assessment will be awarded by an independent consortium of national associations to which OCD has given responsibility for developing and administering CDA accreditation. The consortium is interested in our work in developing assessment criteria.

The model is also consistent with plans of the OEO Manpower Division to gain insights into programs related to welfare reform. Our demonstration should shed light on the welfare mother's problems in getting good care for her children as she upgrades her skills and enters the labor market. This is being developed in a proposal to OEO.

Next steps

Complete negotiations with community- and senior-college collaborators.

Complete negotiations with child-development-care centers to become cooperating training sites. Design criteria and procedures for selecting trainees.

Review job analysis procedures with cooperating centers; conduct job analysis.

Continue work on developing and applying instruments for assessing job performance levels of child-development-care workers.

Plan and prepare education and on-the-job training program with colleges, centers and ACD.

Prepare criteria for selection and plan for training instructional and supervisory staff.

Submit proposals and negotiate with Federal and state funding sources to support operating costs of model not met by funds through ACD.